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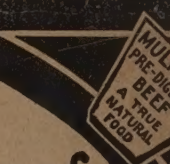

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An era is fast approaching, when no writer will be read and appreciated by the great majority, save and except those who can effect that for bales of manuscript, that the hydrostatic screw performs for bales of Cotton by condensing that matter into a period that before occupied a page.—COLTON.

ORIGINAL COMMUNICATIONS.

PERNICIOUS MALARIAL FEVER.*

BY A. E. COX, M.D.,

Milan, Tenn.

Pernicious malaria, commonly spoken of as congestion, is, in this section of country, occasionally met by most practitioners, and in intensely malarial districts this condition during the hot season is of everyday occurrence.

The term congestion, as it is commonly applied, means one of the different types of pernicious malaria, but in its strict sense the word indicates one of the several stages of inflammation. With every chill we have more or less of that condition commonly known as congestion, its degree being determined by the intensity of the infection, and the intensity of this infection depends on predisposition, kinds of parasites, and anatomical lesions.

The mode of infection is a question about which much has been both said and written within the past few years. Since the discovery by Laveran in 1880 of the specific parasite in the blood, and later confirmed by Marchiafava, Celli and Golgi, and more recently by Councilman, Osler, Dock and others, we have come to consider malaria an infectious disease caused by the hematozoon of Laveran. Most text-books have taught that the respiratory tract is the channel through which infection gains entrance to the body; also the digestive tract as a medium has received some support from our writers; but the inoculation theory seems of late to be the most popular, and, in the humble judgment of the writer, is the most rational. Koch's studies of malaria in South Africa indicate that the disease is transmitted by the mosquito. He, as well as many others, has demon-

* Read before the Gibson County Medical Society, Trenton, Tenn.

strated that the constant use of mosquito netting effectually prevents any one from becoming infected, although he may drink water from the marshes of the Roman Campagna and sleep on a batch of straw placed on the ground. Bignami, one of our most eminent writers and teachers on this subject, sums up all that has been said in the following: "This much at any rate we can assert, namely, that inoculation is the only mechanism of infection which has been demonstrated experimentally."

There are many other interesting points along this line which I would like to refer to, but wishing to make this paper brief and practical, I must desist and revert to my subject.

On the morning of August 10th last I was telephoned to come out to see E. G., female, aged 17 years, married. Previous history: She had had measles, whoopingcough, and about four years ago an attack of malaria of some severity; she began to menstruate at the age of 14, and had had menorrhagia and dysmenorrhea since the establishment of her flow. The evening before I saw her she was taken sick suddenly about 7 o'clock with a chill. At 10 o'clock the next morning I saw her with a temperature of 102½ F., pulse 112 per minute, tongue heavily coated, skin slightly discolored, some headache and a violent backache, abdomen tender and moderately distended, and there was present some nausea and vomiting. My diagnosis was remittent malarial fever, with moderate congestion of the stomach and bowels. I began treatment by giving her calomel and soda, one grain of each every two hours, until her bowels should move freely, which occurred after she had taken six grains of each. For the fever I gave aconite, f. e. one-half-minim, every two hours; for headache I gave acetanilid, two and a half grains, caffein cit., three-quarters of a grain, and Dover's powder, two and a half grains, and ordered the dose repeated in three hours if necessary; quinin bisulphate, in five-grain doses, was given every three hours. I saw her again, twenty-four hours later, and her symptoms were all intensified, with some epistaxis occurring every few hours, which was promptly relieved by the injection into the nose of strong lemon water. Treatment continued, with strychnin sulphate, one-sixtieth grain every four hours, added for the heart, which had become more frequent and not so strong in systole, Sponging was ordered to control the fever, which was then 103½F. Again I saw her twenty-four hours later, with slight improvement of nausea and vomiting, but all other symptoms worse; her abdomen was very tender and considerably distended; turpentine stupes were ordered for the relief of this symptom, and three grains of salol were added to each capsule of quinin; strychnin was increased to one-thirtieth of a grain every four hours, and aconite discontinued. Six hours later I saw her, having had Dr. C. called in consultation. Her symptoms by this time were as follows: Pulse 140 per minute and weak, temperature 105F. in the axilla, tongue coated brown and very dry, abdomen distended and so tender that the least jar caused by walking

over the floor was painful; her bowels had not moved for forty-eight hours, notwithstanding she had taken twelve grains of calomel and soda; her kidneys were acting fairly well; she was sweating profusely; skin was cold and clammy. We readily agreed that something must be done, in addition to what had already been done, to stay the process of this disease, as all symptoms had grown steadily worse. She was well cinchonized, as evidenced by tinnitus aurium, she having taken two scruples daily of quinin bisulphate. I suggested more quinin, to which Dr. C. agreed, and we gave her hypodermically one dram of quinin hydrochlorate, strychnin sulphate in one-thirtieth grain dose, every three hours, which were continued, and cold sponging to control the fever was administered; we also gave a quarter of a grain of morphia, with one-fiftieth grain of atropia sulphate. I saw her ten hours later; no improvement. I repeated the puncture of quinin hydrochlorate and of the morphia and atropia. At 2 p. m., twenty hours after first puncture of quinin, her bowels moved freely, and at 6 p. m. her condition was slightly improved. During the night her bowels moved four times freely, her kidneys continued to act well, and by next morning all symptoms had improved; her abdomen was not so tender and the tympanites was not so marked. Quinin bisulphate was again administered by the mouth, in five-grain doses, until she was well on the way to recovery. She steadily improved until the 20th, at which time I dismissed her, after prescribing a good tonic of strychnin, iron, quinin and arsenic.

SURGICAL FEVERS.*

By W. R. JACKSON, M. D., Mobile, Ala.,
Professor of Surgery in the Medical College of Alabama.

There are two theories of fever-production exploited at present.

The one is the "combustion" and the other is the "neurotic" theory. The combustion theory claims that "thermotaxis," heat-regulation of the body is maintained by heat-radiation from the surfaces of the body, and heat-generation from the oxidation of the tissues and blood; when the heat-generating area exceeds the heat-radiating area, fever results.

The cutaneous and mucous surfaces, as well as the secreting and excreting glands of the body, constitute the heat-giving-off area, while blood and the various tissues of the body (principally the muscles) form the heat-generating area. When the surface capillaries and arterioles are contracted (anemic) through the vaso-motor nerves, the blood is driven from the heat-radiating area to the heat-generating area internally, thus diminishing perspiration, and increasing oxidation, evidenced first by chill, then elevation of temperature (fever).

*Read before the Medical Association of the State of Alabama.

The neurotic theory holds that there are "heat centers"—excito-caloric centers, in the floor of the fourth ventricle of the brain and in the lateral columns of the spinal cord. When these "thermic centres" are disturbed, or irritated by any cause—foreign substances in the blood, the impulse is transmitted to the tissues, muscles usually —by means of the "catabolic" nerves, causing increased metabolism, hence increased heat in the body.

Both theories, however, hold that the primary disturbance, or irritation of the nervous system by foreign agencies in the blood, is a prerequisite to fever-production. The mechanism of special pyrexial nerves, is inexplicable. The pyrogenous or phlogistic material, be it fibrin-ferment, pus, blood serum, disintegrated fixed tissue cells, bacteria, or their toxins or ptomaines, must act, and does act primarily on the nervous system or centres, thus causing a disturbance of the thermo-taxic equilibrium, which, results in not only increased oxidation, but retention of preformed heat in the body; such heat being above normal, we term it "febrile temperature," or fever.

The special nerve action in the processes of secretion and excretion and catabolism, increasing the one and inhibiting the others, is not thoroughly known at present; and, it is doubtful that the near future will enlighten us.

Experimental research has shown that most any substance—charcoal, dust, chemicals, pepsin, pancreatin, trypsin, or even blood injected into the circulation, will cause a rise in bodily temperature. The explanation offered is that these foreign substances become pyrogenous in the blood by acting on the corpuscles, setting free a fibrin-ferment, which has the specific property of disturbing the nervous system in its heat-regulating influence.

An important and acutely interesting question of to-day is, "Does febrile temperature result from an effort on the part of nature (the body) to protect itself against invading organisms or agents?" "Is it a result of the struggle for existence between the body and bacteria? Or is the fever an evidence of bacterial victory, a condition favorable to microbic well being? Which is it?"

Formerly it was held by most surgical pathologists, as well as practitioners of medicine, that fever was a disease *per se*, and should be treated as such; later, at the inception of the microbian age or era, the profession held the theory that fever was an evidence of bacterial victory, and greater the fever the more pronounced the victory, whereas, to-day, the trend of opinion is toward the other side, i. e. that febrile temperature is an index of the extent of chemical changes in the blood and shows the amount of antitoxic or cytotoxic material, or alexins, ready in the blood to combat bacteria. That fever is a "necessary evil," so to speak, and not so dangerous to life as the cause that produces it (bacteria). So, the treatment of fever to-day is not depletion, starvation, and antipyretics of old, but consists in the conservation of energy and vitality, by stimulating and nourishing the patient and aiding the emunctories.

I shall define surgical fever as an abnormal elevation of temperature arising from operation-wounds, accidental injuries, and traumatisms of parturition. Any of these conditions may afford an infection-atrium, through which extraneous materials may gain entrance into the blood. Fever following any of these conditions would be denominated "surgical fever," because it carries with it the thought of surgical procedure, either in its causation or its treatment. It is not necessary for a wound to be an open one for surgical fever to result. Notice how often subcutaneous contusions or simple fractures result in either fermentation fever, from absorption of aseptic material at the point of injury, or in suppuration fever and inflammation, due to localization of pyogenic bacteria, which are already in the circulation, waiting for a "*locus minoris resistentiæ*"—a weak point in the tissues, furnishing a culture medium, favorable for rapid multiplication of micro-organisms.

"Surgical fever" and septicemia are synonymous, though some pathologists restrict the terms "surgical fever" to fermentation fevers and urethral fever. J. Collins Warren, of Boston, in speaking of septicemia, says: "In dealing with septicemia, it must be remembered that it is an essentially different disease from the 'surgical fevers.'" "The latter are due to the absorption of virus constantly generated in the wound; but in septicemia, there is (except in sapremia) constitutional disturbance, which has become quite independent of its local organ—a disease in the whole system, both blood and tissues involved."

I shall make the terms "surgical fever" embrace all the forms of septicemia, which is a "general febrile affection, caused by the introduction into the circulation of the products of fermentation or putrefaction."

Clinically, I shall describe four forms of "surgical fever," viewed from an etiologic standpoint: 1, Fermentation fever; 2, sapremia; 3, progressive sepsis; 4, pyemia.

While treating of this subject, I wish to make a distinction between "septic intoxication" and "septic infection." Septic intoxication, or "toxemia," is caused by the absorption of a preformed ferment, toxin, or ptomaine, which manifests its extreme effects immediately on entering the circulation, and ceases its action when it and its focus of production are removed.

While "septic infection," or "bacteriaemia," is a progressive febrile disease, due to living microbes in the circulation, where they rapidly multiply, and produce their pathogenic action on the blood and tissues.

1. Fermentation Fever, aseptic fever, resorption fever is a general febrile disturbance, caused by the absorption of the products of aseptic tissue necrosis. This is the most simple and harmless of all surgical fevers—it comes on soon after an injury or operation, and, in all probability, is due to absorption of primary wound secretion, which is an aseptic, phlogistic material, that acts on the corpuscles,

setting free in circulation a fibrin-ferment, which is a fever-generator. Some pathologists intimate that even this ephemeral fever may be due to pathogenic microbes of too feeble potency, or too few in number, to produce more violent symptoms.

The temperature of "resorption fever" makes its advent in a few hours after traumatism, and reaches its maximum—102F to 104F degrees—very rapidly, and declines in one to three days. The patient feels well, and there is very little constitutional disturbance; should the fever continue beyond the third day, you may be apprehensive of a more grave type of sepsis.

2. Sapremia is a general febrile condition due to absorption of the products of putrefaction; it is a typic form of "septic intoxication," because it is always due to preformed ptomaines, elaborated in dead tissues by saprophytic, or putrefactive bacteria. When necrotic material is exposed to atmospheric air, putrefactive bacteria attack it, and set free ptomaines, which are chemical alkaloids somewhat resembling atropine in action—dilating the pupils, paralyzing intestinal muscles, and accelerating the pulse.

Necrotic material excluded from the atmosphere, would cause only fermentation fever, and not sapremia. The principal saprophytic bacteria known to produce ptomaines are: Bacillus Saprogenes No. 1, No. 2, No. 3; Proteus Vulgaris, Proteus Mirabilis, Proteus Zenkeri, Bacillus Aerogenes Capsulatus. Most of these bacteria are gasogenic, and do not, as a rule, produce any pathologic changes in the living tissues, but manifest their action on necrotic tissues only. Sapremic septic intoxication of a severe type gives rise to chill and continued fever, with morning remission. The heart is weak and the tongue is "driek-beef" in appearance. Headache, delirium and insomnia indicate danger. Subsultus, dilated pupils, clammy perspiration, livid mucous surfaces, feeble pulse, and involuntary discharges indicate approaching dissolution. Sapremic intoxication will be easy to determine by the odor of putrefaction, which may be in a blood-clot in the wound, fragments of a compound fracture, or pieces of placenta in utero. The prognosis depends on the size of the toxic dose, already absorbed, also upon the feasibility of removal of the local depot of putrefaction. If the dead, infected tissue can be removed before a lethal dose of ptomaines reaches the general circulation, the case will be favorable.

Suppuration Fever is a form of "septic intoxication," due to the absorption of toxins from pyogenic bacteria, and resembles both "fermentation fever" and "sapremic intoxication," or fever, and it was thought absolutely necessary to have suppuration fever (pus in the wound), in order for perfect wound-healing.

Suppuration Fever is not altogether a form of fermentation fever, but it is akin to it, in that it is partly due to absorption of necrotic material at the point of inflammation; it is partly due to ptomaine or toxin of bacterial origin (staphylococcic). Suppuration fever can

become so severe that it may be termed "progressive sepsis," or it may become "pyemia."

So, suppruation fever may have an element of all forms of sepsis, or surgical fever, viz: Fermentation fever, sapremia, progressive sepsis, pyemia; but, ordinarily, suppuration fever means "purulent intoxication," from the absorption of toxins of pyogenic bacteria; however, should the bacteria themselves become absorbed, then pyemia results.

3. Progressive Sepsis is "septic infection," caused by pus microbes entering the circulation from a local septic focus, and retaining their power of reproduction, in the blood, multiplying rapidly there until they destroy the patient.

The "intoxication" in this form of sepsis is caused not only by the toxins from the primary seat of infection, but also by the toxins that are produced in the blood by the microbes which it contains. The toxins are formed both in the tissues and blood, in great profusion, so much so that the "hemolysins" and "alexins" of the blood are overwhelmed and neutralized, and the antiseptic properties of the fluids of the body, as well as phagocytosis, become as naught in the "battle for life."

Pyogenic microbes in the tissues and blood are the most frequent cause of progressive sepsis. Why these microbes do not always produce progressive sepsis is a great wonder. The explanation being that the quantity of bacteria is not sufficient, and the local and general tissue resistance is amply adequate to prevent the action of bacteria and their toxins.

The necessary conditions for progressive sepsis are: (1) Large quantities of pus-microbes in the tissues; (2) debilitated condition of the tissues, due to antecedent pathologic conditions, or trauma; (3) lowered antiseptic powers, or properties of the blood and fluids of the body, caused by anæmia or other constitutional diseases.

The most typical clinical pictures of progressive sepsis are seen in diffuse septic peritonitis, puerperal fever, and acute multiple suppurative osteomyelitis. Chill ushers in the attack, and profound prostration becomes a marked feature, particularly after severe operations or injuries, when it is difficult to decide whether the pronounced loss of strength is due to shock, hemorrhage, the anesthetic or incipient progressive sepsis.

The temperature may not be high, on the contrary it may be subnormal, and when so, with a rapid feeble pulse, grave sepsis is present, even if only a slight wound exists. One peculiar, and often delusive symptom present, is the utter indifference of the patient to his condition and surroundings; this apathy is markedly characteristic of profound "septic intoxication," typified in typhoid fever. A low temperature and feeble pulse are of more serious import than a high temperature and firm pulse. Vomiting and diarrhea are constant symptoms, and, in rapidly fatal cases, persist till the end. The

patient is often icteroid, or petechial and finally, cyanotic in the face.

Progressive Sepsis is always a grave disease, but there are cases that do occasionally recover, especially when the foci of infection are amenable to early disinfection. Delirium, rapid pulse, subnormal temperature, dry tongue, and persistent vomiting and diarrhea are unfavorable symptoms.

4. Pyemia is due to pus or its component parts entering the circulation causing chills, intermittent fever, and "metatistic abscesses." Pus entering the blood current, usually by a thrombus, which is formed in the following manner: 1st. Septic phlebitis from pus-microbes causes a roughening of the intima of the vein. 2d. The third blood corpuscles, by mural implantation, or "conglutination," form a white thrombus (intra vitam clot). 3rd. The white blood corpuscles, or leucocytes incorporate themselves, by "aggregation," with the "intra vitam clot," thus favoring the deposit of the red corpuscles, thereby producing a red thrombus. 4th. Pyogenic microbes attack the red thrombus and soften it, setting free suppurating fragments, which become septic emboli in the general blood current. 5th. Septic emboli are arrested in the nutrient vessels of distant organs and tissues, causing infarcations and metastic foci of suppuration.

In all forms of suppuration, some pyogenic microbes enter the general circulation, but do not produce pyemia, because the quantity of pus-microbes is too small; because of the vigorous vital resistence of the body; because of the absence of septic-phlebitis, hence the absence of purulent thrombi and emboli as agents of transportation of pus-cocci.

Pyemic form of surgical fever is nearly always fatal, with some exceptions. I will call your attention to a peculiar well-known clinical form of surgical fever familiar to you all, and variously designated as "urinary fever," "urethral fever," and "urine fever." It is the reactionary fever which very frequently follows trivial surgical maneuvers in the genito-urinary tract. Various authorities differ as to the pathology of these polymorphous disturbances. Some claim that this fever is due to shock: others hold that it is caused by uremia, while some maintain that sepsis is entirely responsible for all the phenomena; others suggest that absorption of ammoniacal urine causes the fevers, and others still put forth the theory that obscure and complex changes in the urinary secretions take place by autogenesis, thus producing a new unisolated toxic compound, which acts on the nervous system.

Etiologically, the so-called "urethral fever" includes the following morbid phenomena—all of which are secondary to genito-urinary diseases, chronic disease, or injury of genito-urinary tract: (1) Nervous rigor, not succeeded by fever; (2) fermentation fever; (3) toxemia from shock, causing perveted metabolism, resulting in for-

mation of toxins; (4) sepsis, which may be progressive, or of a milder type; (5) pyemia (pus infection).

It has been shown that normal healthy urine absorbed, or injected into living tissues, will not cause any pathologic changes. Decomposed urine, however, is destructive to fixed tissue cells and leucocytes, causing suppuration and necrosis, similar to that produced by virus of erysipelas, dissecting wounds, and the venom of reptiles. Imperfect drainage of the urethra after operations and injuries are conducive to "urinary fever."

The liability to urethral fever is proportionate to the depth of the urethral traumatism. Injuries to the female urethra are not usually followed by urinary fever, because of the shortness and patulousness, as well as the insensitiveness, of this canal in the female.

The treatment of surgical fevers resolves itself into prophylactic and radical—medical and surgical. The prophylactic treatment consists in maintaining asepticity of all wounds, by strict asepsis and antisepsis. The surgical treatment of septic wounds consist in thorough "debridement," or removal of all septic and sapremic material, and keeping the wound surgically clean. The frequent inability of the surgeon to convert septic into aseptic wounds, is one of the opprobriums, or reproaches on modern aggressive surgery of today. How often do you see phlegmonous inflammation and suppuration persisting in its course, in spite of the vigorous use of potent antiseptics!! The great difficulty in such a condition is the inaccessible location of the bacteria, in the deeper tissues.

When free incision and drainage, together with a copious antiseptic absorbent dressing, fail to check the local and general septic processes, then continuous irrigation of the infected tissues with a hot saturated solution of acetate of aluminum, or Theirsch's solution, frequently inhibits, or control local spread of septic conditions. Pure carbolic acid, followed by alcohol, is very effectual in controlling suppurating processes. The medical treatment of all forms of surgical fevers is about the same, differing in degree only. Stimulants, diffusible and specific, are always indicated in septic intoxication (toxemia) and septic (bacteriemia). Concentrated liquid nourishments are very important agents in the treatment, not only of surgical fever, but of all fevers whatever their origin.

Aiding the emunctories is always a positive indication and should be done cautiously, for fear of causing depression. I know of no better assistant to the excretory and secretory organs than an abundance of water, both by the stomach and bowels. This form of treatment, particularly saline solutions, per rectum, has been recently popularized in the treatment of septic fevers, especially when of the puerperal type. The saline solutions are frequently given intravenously, when the case is one of great severity.

Normal saline solution [.6 per cent] has been triumphantly used in desperate cases of puerperal sepsis; three quarts of the solution put into the median cephalic vein, and repeated in twelve hours,

usually suffice to cause free elimination of toxins and bacteria, by the kidneys and skin, then the saline is continued, per colon, until the patient is safe. This same treatment has recently been used with great success, in all forms of grave surgical fever, and deserves a fair and frequent trial at the hands of the surgeon. Antistreptococcic serum may be used in undoubted streptococcic cases. One thing that must not be done is the administration of the coal tar derivatives, they are positively contra-indicated, because they depress an already weak heart, and diminish tissue-resistance to toxins and bacteria. Another contra-indicated procedure is the cold bath, which is harmful, because it diminishes excretions and impedes cutaneous capillary circulation; hot baths would be preferable, as they favor skin action and excretions.

THE RECIPROCAL RELATIONS BETWEEN PHYSICIANS AND MEDICAL JOURNALS.*

BY BURNSIDE FOSTER, M.D.,

Editor St. Paul Medical Journal, St. Paul, Minn.

Probably no one who has given thought to the subject will deny that there are too many medical journals published in the United States, and yet it is not likely that any two persons would agree as to which ones should be stricken from the list as superfluous and unnecessary. I propose to discuss briefly the subject of medical journalism, the relation of the medical journal to the practitioner of medicine and the duty which, it seems to me, the physician owes to medical journals. There is no physician in active practice, no matter whether he lives in a large city or practices alone in some isolated community, who does not need to be kept in touch with the world of medicine, and he can only do this by means of medical journals. The weekly journal is the most popular and is the most valuable, and there are few physicians who cannot afford two weekly journals. The Journal of the American Medical Association should be received by every physician in America; as a matter of fact it is received by about one-tenth of them. The cost of this journal should not be charged to the medical journal expense account, since it seems to me that five dollars a year is little enough to pay for the privilege of membership in the American Medical Association, and the journal is sent to every member who pays his annual dues. In the Journal of the American Medical Association the physician not only finds an account of all that takes place at the annual meetings with the full text of all the papers that are read there, some good, some to be sure, bad, and some of indifferent merit, but he finds the reports of numerous important medical societies which meet at various times and in various places during the year, a considerable

* Read before the 34th annual meeting of the Minnesota State Medical Society at Minneapolis, June 18, 1902.

number of important articles written especially for the journal, much good editorial discussion of the burning medical questions of the day, and an excellent digest of the current medical literature of the world as well as interesting medical news items from different parts of the country, reviews of recently published medical books and correspondence from different sources concerning medical questions of interest, the whole being completely and exhaustively indexed at the end of each volume. All this the physician gets each week as one of the privileges of membership in the American Medical Association. In addition to the journal of the Association, the writer believes that there are very few physicians who cannot afford one other weekly medical journal. There are a number to select from, each having something to commend it, and while it is not my purpose to make any invidious comparisons, it is my own strong conviction that the journal whose ownership is divorced from all outside business interests, and which is largely managed and controlled by medical men, is the one which most deserves and which will best repay their support. Such a journal can fearlessly discuss and expose the schemes which are, and which always will be, from time to time, devised for the furtherance of individual interests at the expense of the good name of Medicine. Having two weekly medical journals, it might seem that the average medical man, especially if he felt obliged to figure his expenses closely, as which of us does not, was well supplied. So he is well supplied, and if his only object is to keep in touch with the general world of medicine, he may perhaps stop with his weekly journals. The physician who does not live in or near one of the great medical centers where the medical weeklies are published, feels or should feel, another need which it is the function of medical journalism to supply. This need, and a most important one it is, is to keep in touch with the profession of his own neighborhood; nearly every county has its own medical society, every county which has physicians enough to organize one should have its own medical society, and there are numerous other local medical societies, and every State should have its own medical journal, which should have as one of its most important objects the placing on record of the doings of the various local medical societies and the publishing of the more important papers read before them. Such a journal if well conducted should receive the support of the whole profession of the State. The ideal plan would be for the State medical society to own and publish the journal and have it occupy the same relation to the medical profession of the State as the Journal of the American Medical Association occupies to the medical profession of the country. Where there are a number of rival medical journals in the same State, it is the duty of each physician to ascertain the best one, usually an easy task, and give that one his earnest support. In return for this support what does the medical journal owe to its subscribers? It owes them the prompt publication of all medical society reports and notices, whenever such are furnished in proper

season by the secretaries of these societies; and here let me say, in passing, that these societies should insist upon their secretaries sending reports of their meetings regularly to at least one of the journals published in the State. It owes them an active support in all matters pertaining to medical organization and medical legislation for the suppression of quackery, and for the regulation of medical practice. It owes them a fair, honest and discriminating review of all new medical books, by men competent to write such reviews, so that its readers may know which of the new books it will pay them to buy, and which ones to avoid buying. A most valuable feature of the local medical journal, and one which cannot fail to be of great service to its subscribers if the work is well done, is the abstracting of the important contributions to the different departments of medicine and surgery, taken from current journals which its readers are, for the most part, not likely to have access to.

The local medical journal has a very important part to play in the uniting and organizing and holding together the members of the medical profession in its own territory, in voicing their sentiments on all matters of general interest to the profession and also in bringing the medical men of different parts of the country into closer touch with each other. Many an important contribution to medical literature has been made in a paper read before some little known local medical society, which would perhaps never have been printed had not the editor of the local medical journal pursued its author until he was finally induced to put his manuscript into shape for printing and send it in for publication. Many rare and important clinical observations are recorded in the local journals, which, were it not for the existence of these journals would never be recorded. Such papers and clinical reports frequently give rise to correspondence between medical men in different parts of the country and form the starting point of pleasant and valuable friendships between physicians who might otherwise have never known each other.

The local medical journal is a perfectly legitimate and a convenient medium by means of which those who are engaged in certain special lines of practice may make themselves and their work known to the profession of the State, either by means of papers and case reports, or by means of a standing card in the advertising pages of the journal. This latter method has never found favor in this part of the country, although in many places it is a common practice and there can be no ethical or other objection to it.

The local medical journal owes something to its subscribers in regard to the advertising contracts which it accepts, and it certainly owes it to its subscribers not to sell to its advertisers a line of its reading pages. It is impossible to draw a hard and fast line between those advertisements which it is proper to admit and those which it is not; there will always be certain preparations concerning which opinions will differ. I believe all will agree that preparations of unknown composition should not be admitted. There can, however,

be but one opinion on the subject of printing as original articles or as editorials, matter which is furnished by the advertiser concerning his preparations. This, it seems to me, is the lowest form of prostitution of which a medical journal can be guilty. The subscribers to a medical journal certainly have a right to demand that what they are given to read shall represent the honest and sincere convictions of the contributor to, or the editor of, the journal, and not advertisements disguised as reading matter.

If the local medical journal honestly strives to perform its duty to its subscribers as I have outlined it, and to be in all respects loyal to the best interests of the medical profession, it surely has a right to expect something in return from the medical men in its legitimate territory. It should receive their subscriptions with prompt annual payment of the same. It should receive their support in the various ways which will help to make the journal prosperous and successful. Every physician has from time to time interesting and unusual clinical experience which should be placed on record, and the writing out of which takes but a very short time. Medical journals are always eager to receive these clinical reports and they are often more interesting and valuable to their readers than the longer and more elaborate papers. Medical men can assist the medical journals very materially by reporting their interesting cases more frequently than they do and they will find that the doing so is of both direct and indirect advantage to themselves in various ways. It is not only the successfully diagnosed and treated cases that should be reported, but the failures and mistakes should also be recorded, the latter being often more valuable than the former. The readers of a medical journal may also be of great service to the editor, and add much to the value and interest of the journal, by giving him editorial suggestions from time to time. A medical editor, if his heart is in his work, desires to so conduct his journal that it will reflect the best thought on all important medical questions, not only of general but also of local interest. Many subjects must from time to time suggest themselves to the readers of the journal which have not occurred to the editor and the discussion of which would be of interest and of value. Physicians would confer a real favor upon the editors, at least upon some editors, by corresponding with them occasionally upon the editorial management of their journal. Letters to the editor, for publication, upon subjects either of local or general medical interest are always gladly received and show a friendly interest in the journal, which is always pleasant to the editor.

Another thing which medical men owe to the good medical journals is, not only to refuse to support but to do all in their power to discountenance the poor ones. There are a large number of cheap medical journals, usually owned and managed by persons having no interest in the medical profession, which are conducted solely for the purpose of making money and whose editorial and reading pages are for sale to the highest bidder. The pages of these journals are

usually filled with so-called original articles which are furnished by their advertisers, and which consist for the most part of spurious case reports of patients said to have been cured by this or that proprietary or patent medicine. These journals usually have a large circulation, because, having practically no bona fide subscription list, they are mailed to physicians whose names are taken at random from the medical directory, and they can make their circulation as large as they desire. Such journals are not only a blot on medical journalism, but they are distinctly detrimental to the interests of scientific medicine and should be repudiated and discountenanced by all decent physicians.

Medical journalism as a whole can be, and should be, moulded by the medical profession as a whole, and if medical men would give a little more thought to the matter they could easily eliminate the bad journals and maintain and improve the good ones. If every physician who has at heart the best interests of his profession, and of scientific medicine, would look carefully into the subject of medical journalism and having thoroughly surveyed the field would subscribe only to those journals which appeal to him as being substantial, clean, honest and well conducted, and would not only refuse to subscribe to, but would refuse to support in any way, those journals which are either owned by or which pander to commercial enterprises whose only object is to make money out of the medical profession, we would have fewer and much better journals.

PSEUDO-PREGNANCY.

REPORT OF CASES.[1]

By W. S. SMITH, M. D.,

Professor of Gynecology at the Maryland Medical College; Gynecologist to the Franklin Square Hospital, Baltimore, Md.

When we bear in mind the fact that in many instances the diagnosis between true and false pregnancy is by no means easy, and think of the frequency with which the symptoms of gestation are either simulated or obscured by disease, not to mention the possibility of the condition being deliberately and wilfully feigned, it should not be necessary to insist upon the necessity of greater caution than is sometimes shown by medical men in answering the simple query, "Am I pregnant or not?" Upon our reply to that apparently innocent question may obviously depend the good name of a young woman, the happiness of a wife, or the reputation of a physician. Indeed, there is perhaps no complaint which, when misunderstood and mismanaged, may give rise to greater trouble to practitioner as well as patient than pseudo-pregnancy, and none in the diagnosis of which mistakes are more commonly made. I think I

1. Read at the annual meeting of the Medical and Chirurgical Faculty of Maryland, held in Baltimore, April 22-24, 1902.

am justified, therefore, in saying that the subject is deserving of more than passing attention or merely theoretical interest. In the pre-aseptic days, before the present perfected technique in abdominal surgery had been evolved, and when operations within the peritoneal cavity were attended with such danger, the differential diagnosis of pregnancy was a matter of supreme practical moment. The surgeon who opened the peritoneum in search of a supposed tumor, only to find a physiological tumor—the pregnant uterus—had oftimes made a serious and costly error. At the present day, when exploratory celiotomy has become a comparatively safe procedure and is so often employed as a diagnostic resource, this phase of the subject has far less practical significance. Conversely, however, the differentiation of the various intra-abdominal and intra-pelvic conditions which may present a more or less complete mimicry of pregnancy is still of very considerable importance, involving, as it does, either an entire omission or an indefinite postponement of treatment when the indications for remedial measures may be imperative.

In view of these facts, and of the scant attention accorded the subject in the obstetrical and gynecological text-books, I have thought that it would not be unprofitable to bring this topic before the Faculty. If, in doing so, I should succeed in eliciting some discussion of pseudo-pregnancy, and above all in giving never so little additional emphasis to the importance of being less hasty in diagnosticating pregnancy where in most cases its non-existence can be easily established, my purpose will have been accomplished.

The frequent occurrence of pseudocyesis as a climateric condition has been pointed out, especially by those engaged in dispensary and hospital practice. This fact may have led some who have given little or no attention to the subject to associate it almost exclusively with that period of a woman's life. Such an impression is altogether erroneous. Pseudo-pregnancy may occur at any period from puberty up to and beyond the menopause. I need only refer to the varied forms of disease by which pregnancy may be counterfeited, some of them occurring in youth as well as in old age. Any morbid condition which causes an enlargement of the intraperitoneal cavity, such as ascites and visceral tumors, and especially solid and cystic growths of the uterus and the ovaries, may give rise to difficulties in diagnosis. Less frequently, physometra, or gaseous distension of the uterus, hematometra, the so-called "phantom tumor," and molar pregnancy may be encountered. In some of these conditions—such, for instance, as hematometra, myxomatous mole, and intramural fibroid tumors of the uterus—not alone the symptoms but many of the signs of normal gestation may be present in such array that the most careful observations and the most thorough diagnostic skill are required to arrive at a correct conclusion.

Of the differential diagnosis of these conditions it is not my purpose now to speak, particularly since it must be said that they are relatively infrequent, and that the largest number of cases of false

pregnancy are found in women approaching or beyond the menopause, in whom there is no gross lesion of the intrapelvic organs, and since also it must be acknowledged that it is in just such cases that the proper diagnosis can most easily be made. The two cases about which I shall speak belonged to this class. One of them was Mrs. C., residing in the southern section of the city, who called me from the house of a neighbor and made a statement substantially as follows: she was 35 years old; had been married about ten years, but had no children. Her previous personal history was good and she had enjoyed excellent health. She was pregnant; of that she was sure. She not only felt that she was pregnant herself, but a physician had told her about three months previously that she was in the seventh month of gestation. She desired to consult me because she had been suffering greatly with gastric disturbance, had little or no appetite, could not sleep at night, was extremely nervous, and, besides, the movements of the child caused her a great deal of discomfort. Moreover, the time of her expected confinement had already passed and that had begun to create no little anxiety. She simply wanted to know what was wrong, if anything, and in what way relief could be obtained. In reply to questions from me she said that she had menstruated regularly up to ten months before, at which time the menses became very scanty, and that they had finally disappeared entirely. At about the same time she began to suffer from nausea, her breasts became larger and were painful, her appetite was capricious, and her nervous system markedly deranged. Several months after the beginning of the symptoms enumerated—she could not say definitely just when—she began to notice the movements of the child, which had gradually become stronger, until at that time they were extremely vigorous and persistent. About this time, also, her abdomen commenced to enlarge and had continued to increase in size somewhat rapidly. Her friends had noticed the marked change which she had undergone, and of course agreed with her physician and herself that she was pregnant and joined in the delightful anticipation of her approaching maternity. I was told by a mutual friend and neighbor that unusual preparations had been made for the anxiously awaited event and that baby clothes in great abundance had already been completed.

Such were the circumstances and such the condition of the woman at the time of my call. I told her it would not be possible for me to advise her intelligently without first making an examination, to which she readily consented. Her abdomen was bared from symphysis to sternum and hastily explored. It was quite as large as that of a woman at the end of pregnancy, but was not tense. The enlargement lacked the definiteness of outline, the prominent ovoid shape which we are accustomed to observe in advanced gestation, but was more generally distributed and more uniform. The umbilicus was not prominent, but retracted; there was little or no pigmentation of the linea alba, and no evidence of the so-called lineæ

albicantes or striæ gravidarum. Percussion gave a note that was flat in the lower portion of the abdomen and semi-resonant above. On grasping and lifting the abdominal wall between my hands, very great thickening was made out and much of the swelling disappeared. Auscultation did not disclose fetal heart sounds, but did reveal marked gurgling due to imprisoned intestinal gas. On making a vaginal examination my reserved diagnosis was abundantly confirmed. The vaginal walls were not discolored, were not unusually moist, thickened, or redundant, and, above all, the cervix was long, conical, and hard. On pushing the cervix backward in the direction of the posterior vaginal fornix and lifting it up on my forefinger, while the outstretched fingers of the other hand were as far as possible pushed beneath the roll of fat and held firmly against the lower abdominal wall, I was able to palpate the body of the uterus, which was apparently undersized. I promptly told Mrs. C. that she was not pregnant, but she evidently did not believe me; so I suggested that, in order to make "assurance doubly sure," I would call again the next day, bring my instruments, and give her an even more thorough examination. To this also she agreed. However, I received a terse note from her the next morning in which she said that it would not be necessary for me to call again. Strange to say, this lady was visited shortly afterward by a prominent physician, who also eliminated pregnancy, but advised her to go at once to a hospital to be operated upon for an ovarian cyst. She followed his advice, was very properly and wisely examined under anesthesia at the hospital, when it was discovered that the so-called cyst had "silently stolen away." The diagnosis was eventually made of a premature menopause, a great excess of abdominal and omental fat, and dystrypsia associated with a great deal of gaseous distension of the bowels.

The case of Mrs. E., living on Eutaw street, was somewhat similar. She was also sterile, about 32 years of age, and had menstruated regularly up to nine months before. At that time she stopped menstruating, began to suffer from nausea, noted enlargement and tenderness of the breasts, followed some months later by great increase in size and what she assumed to be fetel movements. She had convinced herself and her husband that she was pregnant, and, after waiting for the expiration of her time, actually believed labor to be coming on and sent for a monthly nurse. Labor, however, did not progress to her satisfaction, and, after several days of anxious waiting, she sent for me. I did not examine her abdomen, but found the vaginal indications of a non-gravid uterus sufficiently definite to warrant a positive conclusion. The vagina was pale; the cervix was small, conical, and firm; and while the uterus was not clearly palpable, it was evidently not enlarged. I communicated the very unpleasant information to her, but her young husband had been so anxiously and so cheerfully awaiting the advent of an heir that, after my departure, she concluded she would

not undeceive him; so, with the assistance of the nurse, and in his absence, she procured a young baby, which he found on his return snugly ensconced by her side, and which has since, so far as I know, successfully filled the role of the genuine article—the real prince.

It is remarkable with what exactness the symptoms of pregnancy may be counterfeited in many of these cases. Occurring, as they so often do, in women who are approaching either a premature or a normal menopause, who are very desirous of having offspring, and who perhaps have familiarized their minds with everything relating to the subject, it is not surprising that the unwary physician is made to share in the opinion so confidently expressed by the deluded woman. In this way it is that we may have not only the various nervous and sympathetic disturbances supposed to indicate pregnancy, but also such symptoms and signs as morning sickness, enlargement of the breasts and areolar papillæ, and even the secretion of a lactescent fluid. If at the same time the abdomen becomes gradually increased in bulk, whether from an excessive deposit of fat in its walls and in the omentum, from intestinal distension caused by fetal accumulations and by flatus, or from any of the various diseased conditions to which I have referred, the position of the practitioner may become an eminently delicate and undesirable one. For the same reasons, also, it can truthfully be said that spurious pregnancy is often psychical as well as physical in its origin.

I have already adverted to the great difficulties which may be experienced in differentiating various disorders from true pregnancy, especially early pregnancy, even when the most thorough physical exploration is made by the most skilful hands. The class of cases of which the two given may be taken as examples is not so difficult of recognition, and embarrassments only occur either when no examination is made at all or when perhaps an incomplete survey of the breasts and abdomen is all that is attempted. The breast signs and the auscultatory abdominal signs should not, in my humble judgment, be depended upon by the average practitioner, since the sources of error are so numerous. The most generally valuable and reliable diagnostic test, it seems to me, is that afforded by a properly conducted vaginal and vagino-abdominal examination, telling us, as it does, the position, shape, size and consistence of the cervix, giving us valuable information in regard to the color and character of the vaginal walls, and enabling us in most instances to map out with greater or less definiteness the body of the uterus.

I have therefore selected my two cases designedly, belonging, as they do, to that variety of pseudo-pregnancy most frequently met with, in which the psychical element plays a conspicuous part, in which the physician would do well always to be on his guard, and in which, above all, the results of simple diagnostic methods are so convincing and satisfactory. To epitomize my remarks, then, or rather to reduce them to their ultimate analysis, would be to say that my experience leads me to believe that a closer study should

be made of the vaginal indications of true and false pregnancy, that a greater reliance should be placed upon such indications, and that a more frequent resort should be had to the vaginal and vagino-abdominal method of examination in cases where there is the slightest reason for the entertainment of a doubt.

ARE VESSELS INFECTED WITH YELLOW FEVER?—SOME PERSONAL OBSERVATIONS.

By Surgeon H. R. CARTER.

In a paper read before the American Public Health Association at Buffalo, September 18, 1901, Dr. Doty, the quarantine officer of New York, affirms the absence of secondary cases of yellow fever aboard vessels—i. e., that while cases of this disease contracted ashore develop aboard vessels, yet none are contracted aboard the vessel itself—that is, the vessel does not become "infected" with yellow fever.

The experience of other quarantine officers has been different, and it may be of service then to group some cases already of record in which the contrary was observed. It is not proposed to collate a number of examples of vessels aboard which yellow fever was contracted, from the literature of the subject, but to give very briefly the history of some such vessels personally observed by the writer, from his own notes, during a four years' service [1888 to 1891, inclusive] at the quarantine of the Gulf, Chandeleur and Ship islands. Here were received all vessels believed to be infected with yellow fever bound for all of the Gulf ports, except for New Orleans and from Tampa south. Consequently our clientele was considerable. The bulk of them, however, although certainly the worst class of vessels which entered the Gulf of Mexico, were not, in my opinion, "infected" when I received them—i. e., yellow fever could not then have been contracted aboard them.

I will premise here that I accept without reservation the conveyance of yellow fever by an infected mosquito of a certain kind, and that to me a vessel "infected" with yellow fever is simply one which is harboring these infected mosquitoes. Whether they came aboard already infected or, being aboard, became infected by feeding on cases of yellow fever developing aboard ship but contracted ashore, can in general be determined from the history of the spread of the infection. Indeed, it was primarily the history of these and other ships which led to the (tentative) formulating of the laws of the "interval between the infecting and secondary" cases of yellow fever and the " period of extrinsic incubation of places" of that disease, which, and much less, are so clearly explained by the conveyance by a mosquito host.

The deductions as to the disease being contracted aboard the vessels, when such deduction is made, are, however, independent of the assumption of any theory of conveyance. I do assume, however, that the period of incubation of yellow fever, rarely, if ever, exceeds six or six and one-half days.

1888.—SHIP ISLAND.

I. Norwegian bark *Magnolia*, 946 tons, fifty-six days from Rio de Janeiro via Pensacola Bar, rock ballast. Left Rio de Janeiro May 20, left 2 men sick in hospital and had 1 aboard, considered yellow fever. Master sick third day out, May 22; died, May 27. All well till June 1, then several (3) got sick at once. First mate sick, June 11; died, June 17; black vomit. All were sick on the way up except 2; 21 on crew list including the 2 men left in Rio de Janeiro. One of these who escaped fever had had yellow fever, and the other was a lad from Dantzig on his first deep-sea voyage. In all 17 men were sick of fever en route, of whom 5 died. The last case, Elias Eliasen, developed June 14. Here, save the captain, all sickened not less than eleven days after leaving Rio de Janerio, and the first mate and Eliasen on the twenty-third and twenty-sixth day, respectively. They then contracted yellow fever aboard ship.

The picture is that of an infection introduced aboard the vessel by the men who sickened in Rio de Janeiro, i. e., there were uninfected stegomyiæ aboard which were infected from these cases and conveyed yellow fever to the remainder of the crew, except the captain, who contracted it ashore. I did not record the dates of the cases of the men left at Rio de Janeiro; it was shortly before clearing. The interval between an infecting and a secondary case is almost always fourteen days or over.

II. Italian bark *Riagino*, Rio de Janeiro, for Pensacola, fifty-one days out; rock ballast, 560 tons. No sickness in Rio de Janeiro until just before leaving, then sent 2 men to the hospital. Left five days after. Log shows men were taken June 4 and June 6 and removed on June 6. Sailed on June 10. No one had been ashore save master and steward, using a harbor boat.

First case reported sick en route June 21; 1 next day; 6 sick en route; 3 deaths: June 28, June 29, and July 15, all with black vomit. Crew refused duty at second death. Last case well July 13. Sixteen on crew list; 2 in Rio de Janeiro. Master had had yellow fever; steward sick just after leaving, not considered yellow fever.

Six cases developed 10 days after leaving Rio de Janiero. Same remarks as were made of the *Magnolia* apply here.

No record is made of where these two vessels lay in Rio de Janeiro, the writer not then appreciating the importance of this.

1889.

My notes for 1889 are lost, and indeed there may have been in 1888 more than the 2 vessels given above, which should have been included in this paper; but my notes, taken at first solely with the view of determining the period of incubation of yellow fever, give data on only these two sufficiently definite to determine that they were infected—i. e., that yellow fever was contracted aboard.

1890.

III. British ship *Avon*, in rock ballast; 22 in crew, 4 immune to yellow fever. Sailed from Rio de Janeiro April 20. All well in port and en route until thirty-eight days out, when a boy in port watch sickened with yellow fever. Taken to hospital, Gulf Quarantine, on third day, and died on sixth day. Another case developed two weeks later in a quarantine attendant who helped me clean up the room, sail locker, in which the boy was sick aboard ship.

It is remarkable that there should have been only 1 case of yellow fever among the crew aboard this vessel. At the time it was ascribed to the fact that this boy, the only one on the port watch, helped a man, shipped in Rio de Janeiro and immune to yellow fever, overhaul his chest a few days before the boy was taken sick. Whether there was an infected mosquito in the chest which had survived this length of time, or whether there was any relation between the chest and the fever, may be a question. It in no wise affects the present question, that the disease was contracted aboard. It was the first case seen at this station that year.

IV. British ship *Curlew*, from Rio de Janeiro, with rock ballast. No sickness was reported in port, or on arrival. She was cleaned July 22 to July 23, 1890, and disinfection completed July 25, in the afternoon. One case of yellow fever developed July 27, the sixty-fourth day out, in the early morning before day.

V. British ship *Chippewa*, from Rio de Janeiro, with rock ballast. No sickness was reported in port, en route, or on arrival. She was cleaned July 26 and July 27, and disinfection completed July 28. One man, the quartermaster, developed yellow fever July 29, at night, sixty-eight days out from Rio de Janeiro.

The *Avon* made no port after leaving Rio de Janeiro and communicated with no vessel en route. The other 2 made no port save Pensacola Bar, and communicated with no vessel save the pilot boats there and off Mobile Bar. The infection in these 3 vessels, then, must have been contracted aboard. They lay in open roadstead at my station, 1½ miles off shore and about ½-mile apart, and there was no visiting between them and none of their crews was ashore.

VI. Spanish bark *Castilla*, fifteen days from Cienfuegos via Round Island Quarantine, in rock and earth ballast; 14 in crew.

Eight days out from Cienfuegos to Round Island. All well in port, en route, and on arrival. Mate sickened fourth day after arrival at Round Island while discharging ballast. Vessel sent here in tow August 22. Mate had yellow fever; died on the sixth day of illness. Captain developed yellow fever day after mate's death; taken to hospital. No other cases of sickness aboard; the remainder of the crew are, save 1, Manila men, and all probably immune to yellow fever, being mainly residents of Cuba for many years.

Here 2 men developed yellow fever, 1 twelve and 1 seventeen days after leaving Cienfuegos. The infecting mosquitoes may well have been harbored in the hold, which the mate would probably not have visited until he anchored at Round Island and began discharging ballast, and in which the master would not be apt to go while the mate was on duty.

VII. Spanish bark *Grand Canaries*, seven days out from Havana July 7. All well in port, en route, and on arrival and while in quarantine. Crew probably all immune to yellow fever, being mainly Manila men and old residents af Havana.

O. F., quarantine employe, went aboard as ballast master; next day developed yellow fever, July 11. This man had been exposed to no possible source of infection for the six months previous except this vessel. A case nearly similar to the above occurred in 1889, but I have no notes of it.

VIII. Norwegian bark *Queen of the Seas*, in rock ballast, Rio de Janeiro for Pensacola, fifty-four days out. Left Rio de Janeiro with 17 men; 6 deaths en route. All well in Rio de Janeiro. Lay at Mocanque, a healthful part of harbor. None save master allowed ashore, but he went in ship's boat. Left 1 man at Rio Janiero—consumption. Shipped 1 man, a negro, in his place. Sailed April 23; master sick April 26; second mate sick night of May 10; 2 men May 11; 1 man May 12; 2 men morning of 13; 2 during day of 13; 1 man sick and 1 died 15th; 1 man died 17th; 2 sick 17th; 1 died 19th; 2 died 21st and 22nd; 1 sick 21st; 1 died 25th; 13 sick en route, 5 died. The man shipped in Rio de Janeiro (negro) and 1 of the others immune by previous attack. The picture is very clear of a clean ship, infected by the illness of the master contracted ashore—i. e., had uninfected mosquitoes aboard, which became infected from the master sick of yellow fever, and conveyed it to the crew.

IX. British ship *Curlew*, fifty-seven days from Rio de Janeiro for Pensacola. Lay in the Gamboa last eight days. Two men sick February 27, taken to hospital that day; sailed March 1. Master sick March 1; 5 men besides him that night. Two men March 4, one March 5, and two sickening the 13th and 15th, respectively, both with black vomit. All aboard here, 19, were sick en route except 1, a Barbados negro; but don't believe all had yellow fever, the crew having been badly frightened. The earlier cases and the three who died were undoubtedly yellow fever, as well as the steward and

mate. Here we have two cases, at least, developing thirteen and fifteen days after leaving Rio de Janeiro.

X. Swedish ship *Condoren*, seventy-nine days out from Rio de Janeiro via Pernambuco for Mobile. Rock and earth ballast; 18 in crew. All well in port. Lay in Gamboa last five days. No shore leave allowed, but took ship's boat to go ashore. Sailed March 3; 3 men sick March 5; 16 men sick, all told, up to March 26, and 6 deaths. Last man got sick March 26, when she put into Pernambuco short-handed and sent 3 sick men to hospital. Two men sick March 20; 4 men sick March 18; 1 man sick March 26 (really night of 25th). At Pernambuco she lay 11 days and was disinfected by sulphur. Shipped 8 new men, 4, probably 5, of them immune to yellow fever. Developed no sickness on the rest of the way up. Here 4 men developed yellow fever fifteen days from Rio de Janeiro.

XI. German ship *Gustav and Oscar*, Rio de Janeiro for Pensacola. Lay at Cobras, a healthful place. One case yellow fever at Rio de Janeiro, March 22, sent to hospital March 24. No shore leave allowed. Sailed from Rio de Janeiro April 1; first case sickness April 7, 2 men; 3 next day; 1 next morning, and 2 during the day of the 9th. One death on the 10th, leaving 6 men sick. Captain sick on the 10th at night after supper. Last case on 14th. Two deaths on 11th; 1 on 12th. Crew list shows 21 men left Rio de Janeiro; 14 sick and 4 deaths en route. It is reasonably certain that 4 of the remaining crew were immune to yellow fever by previous attack.

XII. Norwegian bark *Crown Prince*, fifty-eight days out from Rio de Janeiro for Ship Island. Lay at Moncanque. No sickness aboard in Rio de Janeiro. No shore leave granted, and did not use ship's boat to go ashore. Sailed April 29. Master sick second day out, April 30. Next case May 16; 3 (2 aft and 1 forward) became sick. May 17, 2 sick in morning, 1 in the day. May 18, 3 men in forecastle sick. May 20, 2 sick, 1 death. May 21, 1 death, 1 sick. May 23, 2 deaths. May 24, 1 sick. May 28, 1 death last night. May 29, 1 sick this morning. May 30, 1 death. The 1 case on the 29th was the last case taken sick. There were 14 men aboard and every man had fever, 6 dying. She put into Barbados on June 10, disinfected and shipped (in quarantine) 4 new men, 1 probably unacclimated. No more sickness en route. All of these cases except the captain's were not less than sixteen days from Rio de Janeiro before developing.

XIII. French ship *Emily Postel*, twelve days from Vera Cruz via Pensacola quarantine. Had "sickness" aboard just before leaving Vera Cruz, 1 man. Sailed from Vera Cruz July 28; no sickness since until crew went to discharge ballast, August 12. One man sick yellow fever August 15, 2 men the same August 19, and 1 man August 20. Disinfection by sulphur was done on the appearance of the first case of yellow fever and no case occurred save the

above. All were developed more than sixteen days after leaving Vera Cruz, hence from infection on board. The history points to infection (infected mosquitoes) in the hold.

The picture given by the *Curlew* and *Condoren* are those of disease conveyed by mosquitoes coming aboard already infected just before they sailed. The infection was not introduced by the men who first sickened, the interval between them and the next cases was too short. Observe that they lay in the Gamboa, directly in the lee of a town badly infected. The other two give the usual history of a clean place (town or vessel) infected by some one developing yellow fever, contracted elsewhere, in it.

XIV. Dr. G., assistant surgeon of U. S. Marine Hospital Service, developed yellow fever June 18 at the Gulf Quarantine Station, and died June 29. He was immediately from New York, where he had been on duty some months, and had been at the station but fourteen days when he was taken ill. There had been no case of yellow fever at the station that year. There were a number of vessels in quarantine, but the *Gustav and Oscar* (No. XI) was the only one I judged to be infected. On this vessel, as on the others, he had been with me inspecting, opening up drawers and boxes, and going into every compartment, etc., for the disinfection. I thought his infection was from this vessel. It was certainly from some vessel.

I think it will be granted from the above that the ability of a vessel to carry the infection of yellow fever is no myth. Here are 13 vessels which did so carry it collated from only three years' observation at a single station. Such vessels are indeed rarer, much rarer, now than they were before 1894, yet they still come. I saw 2 at Tortugas in 1894. Other cases are reported by Geddings and by Echemendia at the same place and at Port Tampa quarantine. Rosenau reports a case contracted aboard the steamship *Vigilancia*, from New York, plying between New York and Vera Cruz via Havana, in 1899. The steamship *Bodo*, last year (1900), from Bocas del Toro, for Mobile, developed 3 cases of yellow fever, seven, eight and nine days out from Bocas del Toro. It would not be difficult, I think, to multiply instances of recent date, yet that they are rarer is without question. On the factors which have brought this about we can barely touch.

Obviously there are two methods by which vessels can become infected. (a) A case of yellow fever contracted elsewhere may develop aboard a vessel already harboring stegomyia mosquitoes which become contaminated from it. (b) The stegomyia mosquitoes may come aboard already contaminated. In the first case, there being nearly always over two weeks between the infecting and the first secondary cases of yellow fever, it results that, if the first case occurs after leaving port, vessels, even sailing vessels, from Cuba and the Caribbean Sea will generally reach quarantine and (if at a southern station) be disinfected—i. e., mosquitoes killed, before it is time for the secondary cases to develop, or, indeed, to be contracted.

This agrees with all observation. In vessels infected in the second way, cases of yellow fever may occur after a very short or no interval from leaving port. The causes, then, which have lessened the number of infected vessels at United States ports, are—

1. The very great falling off of vessels from Rio de Janeiro and Santos since the establishment of the Brazilian Republic. This does away with the bulk of the "long-trip vessels" we used to have, which are the only ones developing secondary cases en route if infected by a case of yellow fever developing aboard. (Vide *a*.)

2. The replacing of sailing craft by steamships. That steamers convey yellow fever less frequently than sailing vessels has long been known. This is because they lie a much less time in an infected port, and the discipline of their crews is better; no shore leave means no man goes ashore. They also make quicker trips, and thus are not apt to develop secondary cases en route, even if yellow fever contracted elsewhere develops aboard and they have the stegomyia aboard. It is also to be noted that the worst parts of the harbors of Havana and Rio de Janeiro, above San Jose wharf and the Gamboa, have never been berths for steamships. Note, too, that the sailing vessels displaced are the foreign sailing vessels; the American schooner was less often infected than foreign vessels.

3. Especially since 1893, and to some extent before supervision had been kept by United States sanitary inspectors in the more dangerous yellow fever ports over vessels bound for the United States, especially of passenger vessels. Certain anchorages have been recommended as safe, others have been forbidden, notably the Gamboa at Rio de Janeiro and certain wharves and parts of the harbor at Havana. Passengers, who it is believed will develop infection aboard, have been barred; shipment of new men in the infected port carefully supervised; vessels in which yellow fever has occurred in port are disinfected before leaving, and many other measures taken to have the vessel leave port clean, or as nearly clean as commercial considerations allow. In general, the vessel owners, especially of the regular lines, have given hearty cooperation in these measures, as well as in keeping the crew aboard and in confining the visits of such officers as must go ashore to daylight. These restrictions, especially the last, have by no means been absolute for all classes of vessels, but are well observed, in Cuban and Mexican ports at least, by probably over five-sixths of the tonnage. The sanitary measures to avoid infection (3) and the proportionate substitution of foreign sailing vessels by steamships (2) are without doubt the main factors acting in cooperation in lessening the infection of ships. No one can read Burgess' list of infected vessels in Havana Harbor (Report, U. S. Marine Hospital Service, 1896) without noting how great has been that decrease in recent years.

We have said that if a case of yellow fever develops aboard a vessel harboring the stegomyia mosquito (proper conditions of temperature being premised) that they may become contaminated by feed

ing on him and infect others. A vessel which has no stegomy ia aboard is like "non-infectible territory" and will not communicate infection, even if cases of yellow fever develop aboard. I think it fair to say that vessels plying to and from southern ports of the United States will, during the summer season, generally have the stegomyia aboard, independently of its berth in tropical harbors, and may at times breed them in their water supply. This mosquito seems to be rare north of Virginia Beach (its distribution has not been sufficiently investigated, however), and a vessel plying to and from a northern port of the United States would not harbor this mosquito unless it came aboard in the tropical port. Now how far this mosquito goes or is borne from shore has not, I think, been directly investigated, but we do know that the crews of vessels moored off from shore (say 200 or more fathoms) in that part of Havana harbor seaward from the line between the Sta. Catalina warehouses and the Machina wharf do not develop yellow fever (unless close to some vessel which is infected). This means that contaminated stegomyia, at least, do not go so far from shore. Lying then at the anchorages accounted safe in Havana harbor, where the passenger vessels for the United States lie, one would think that the probability of any stegomyia coming aboard would be small. At Vera Cruz the vessels must lie nearer shore (although to windward of it), and experience shows that the crews of vessels lying there are not entirely safe, as I believe them to be in Havana, although infection in the part of the harbor picked out as safe is decidedly rare. The anchorages in both harbors regarded as safe are well to the windward of the town all summer. A direct investigation of this matter—i. e., the presence of the stegomyia aboard vessels from northern ports in different parts of the harbor of Havana and other tropical harbors should be made.

To sum up—

1. Vessels aboard which yellow fever had been contracted—i. e., vessels infected with yellow fever have not been rare, at least at southern quarantine stations.

2. Such vessels are much rarer since 1893, and are not very common now.

3. That the diminution of the number of infected vessels reaching United States ports is due mainly to the sanitary measures for avoiding exposure to infection in the foreign port, and to the substitution of steam for sailing vessels. To some degree the falling off of the vessels from Brazilian ports is also a factor.

4. That a case of yellow fever developing aboard a vessel plying between southern ports of the United States and the tropics will probly infect the vessel so that other cases can, if time be given, be contracted aboard her.

5. Such vessels, however, if short-trip vessels, not more than ten or twelve days en route after the occurrence of the case of yellow fever, will in general be disinfected at southern quarantine stations

before any other cases have been contracted aboard, although harboring infected mosquitoes.

6. That a case of yellow fever so occurring aboard a vessel from a northern port of the United States would be able to infect her or not according to whether she had acquired the mosquitoes *stegomyia fas.* in the tropical port.

7. It is, in general, then necessary to disinfect all vessels running between southern ports of the United States and tropical ports if a case of yellow fever occurs aboard, no matter where it be contracted; while vessels running between northern ports and the tropics may, through precautions in tropical harbors, have no stegomyia aboard and are thus not infectable by cases of yellow fever occurring aboard.

8. Some vessels giving no history of yellow fever in ports, en route, or on arrival—even when many days en route—are nevertheless infected and communicate the yellow fever to those who go aboard, vide Nos. IV, V, VI, VII. Note, also, the first case aboard the Avon, No. III, was thirty-eight days out from Rio de Janeiro. This is probably due to the infection (infected mosquitoes) in parts of the vessels unfrequented by the crew while en route, or to the crew being all immune to yellow fever.

ERGOAPIOL (SMITH) IN DISEASES OF THE FEMALE.

BY CHARLES H. SHEPARD, M. D.,
Physician to Lincoln Hospital,
Durham, N. C.

A deep and general interest is attached to all knowledge pertaining to the treatment of common diseases of the uterus, to which women are subject, and a vast literature is the outcome of this profound and focussed interest. We live to-day in an age of transition —a period of change. A great many of the former theories in medicine are fast passing away. New medicines are made, achieve a short-lived success, and then pass on to obscurity. This is true most especially in medicines for gynecological diseases. Of the newer remedies it is hard, indeed, to get one that may be depended upon for long. They soon lose their reputation and potency and are relegated to the past.

We know that all diseases of the womb have not the same etiology nor the same pathology, therefore they should not all have the the same treatment. Far too often the general practitioner groups all these diseases together as one and gives the routine treatment. It is not enough to give anodyne medicines for dysmenorrhea no more than it is sufficient to treat alike all forms of dysmenorrhea.

The operation of curettement has a most important place in these conditions, but like other remedial agencies it has its limitation.

When we curette the uterus we rid it of a pathologically obnoxious lining membrane, and afford a normal membrane the opportunity to be formed.

The healthy woman, with normal genitalia, menstruates regularly and painlessly once a month from puberty to the "turn" of life, except that this regularity is interrupted by pregnancy and afterwards by lactation. Any departure from this rule constitutes an abnormality. Amenorrhea is less frequently met with than dysmenorrhea and irregular menstruation. The present age of transition has brought forth what is popularly known as the "new woman," and she has brought with her new ideas and practices which, in very many cases, retard growth and the natural process necessary for perfect health. For leaving the old landmarks, she has to suffer.

The most generally useful medicine in the conditions of amenorrhea, dysmenorrhea, irregular, scanty and fetid menstruation, in my judgment, is a preparation of the Martin H. Smith Company of New York, known as Ergoapiol (Smith). In the female ward of the Lincoln Hospital, Durham, N. C., I have used this medicine very extensively, and it has not only never failed to benefit and cure, but I know no remedy with which I could replace it were I deprived of it. Its efficacy may be tested by any physician who properly tries it. I mention a few cases, with short description of each, in which it has given the most signal benefit in my hands.

Ergoapiol (Smith) is put up as a small capsule, and is made of a special form of apiol which is of the very highest quality. Combined with this are some other most valuable hemagogues and they all go to make a fine preparation. It seems to be a scientific pharmaceutical preparation, non-toxic, tonic, as well as emmenagogue. What I have to say of this preparation is based entirely upon clinical experience, and I feel safe in saying that it will bear a clinical test whenever properly administered.

REPORT OF CASES.

No. 1.—Mrs. F. was admitted to hospital September 15, 1901; married; no children, though she has been married four years. Had not menstruated for seven years. Womb had been curetted several times; suffered from leucorrhea; pains in right and left iliac regions continuous. Examination showed a very small os, but generative organs were otherwise found to be normal. Another curettement failed to bring on the menses. I then prescribed Ergoapiol (Smith) to be taken one globule three times a day, and afterwards increase to one globule four times a day. After seven days of this treatment she complained of a general feeling of stiffness in her limbs, gasping and a feeling of malaise. The following morning she found to her delightful surprise that she was menstruating for the first time in seven years. At that time the flow was somewhat scanty, but the treatment was continued through three periods. Each succeeding period was more nearly normal than the one that preceded it. Now her functions are regular and I know no reason why she may not become pregnant.

Case No. 2.—Mrs. S. complained of a continuous, dull, dragging pain, situated in the region of the iliac fossa of the right side. Menstruation irregular, scanty, fetid. Married six years; had never been pregnant. Excessive leucorrhea, though otherwise she was perfectly normal. Her weight was 140 pounds. Her condition, and the suffering, both physical and mental, which it occasioned her, was rapidly undermining her health. She was becoming emaciated, appetite of no consequence, general weakness. She considered her condition "hopeless." Cardiac weakness, of which she was a victim, contraindicated curettement—which usually cures "whites" and allows the formation of a healthy lining membrane. Ergoapiol (Smith) was prescribed for her, one capsule three times a day. In conjunction with this I gave tonic medicines. After six weeks' use of this remedy, the woman said she was "feeling so good" that she did not need any further treatment. She had increased in weight and her appetite had become all she could wish. The menstrual flow was increased, and now, five periods having elapsed from the time treatment was instituted, her monthly flow has failed to appear. She does not expect its return for some time—supposing herself pregnant.

No. 3.—Miss S. suffered severe pain each month, beginning a day before the flow came on. The flow was a thick, clotted mass, consisting of membrane and the menstrual blood matted together. She had suffered from puberty, and the suffering became more intense as the years passed on. She was 19 years of age, stout, of healthy parentage. Admitted to Lincoln Hospital, January 15, 1902. She declined an operation. I afterwards prescribed Ergoapiol (Smith) and have continued it for one month. Her next menstruation was free and easy; painless and regular. I doubt not that keeping up this treatment up to another period she will be entirely rid of the hitherto troublesome condition.

No. 4.—Miss W., tubercular history. Menstruation very irregular, sometimes three, sometimes five weeks between periods; very painful; scanty. I prescribed Ergoapiol (Smith) one capsule four times a day, beginning one week before the menstrual period and continued a week after the period. As a result of this treatment the patient feels a great deal better in her general health; her monthly flow has been rendered painless and increased in quantity. Ergoapiol has a tonic action upon the muscular fibers of the womb. Its effect is not transitory, but lasting. This superior preparation is decidedly tonic.

No. 5.—Mrs. D., a victim of endometritis. Pain continues between periods and is aggravated at periods. Leucorrhea was very pronounced; pains in the back; "hot flushes," vertigo, headache. Patient would not allow an operation; highly sensitive. Several preparations were tried, but none gave relief until Ergoapiol (Smith) was used. It has entirely relieved the patient, and she is now loudly singing its praises. In this case treatment was kept up for ten weeks.

Ergoapiol has never failed in my hands. It is not possible that it can cure obstructive dismenorrhea, but with that exception it is indicated in all the other diseases of the womb where a tonic and sedative action is the requirement.

Case No. 6.—Mrs. D., widow; aged 33; had three children, youngest 10 years of age. She had suffered all her menstrual life severe pains in the pelvis at each period; had to keep in bed a week or more each month; paroxysms of pain were followed by a flow of the "whites;" no anemia; womb found to be flabby and relaxed; pains extended down thighs posteriorly. Had been treated for many years by various physicians of note, but had received only temporary benefit.

Ergoapiol (Smith) was given her, one capsule three times a day, and increased at the time of the flow to four a day. After three months of this treatment her menstrual function became regular, and, being entirely well now, she feels that life, after all, is worth living.

I could prolong this list indefinitely with records of cases that have been entirely relieved of these conditions, and I shall be pleased to furnish any information desired as to Ergoapiol (Smith) and its use.

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LIGHT.

[Reprinted, by request, from the issue of May, 1902.]

What is light? What is electricity? What is heat? What is energy? What is gravitation? What is vision, taste, feeling, hearing, smell? What is pleasure? What is pain? What is life? What is sleep? What is darkness? What is death? To answer these questions would require volumes. More than those of the destroyed Alexandrian library, could they be restored, and all the weary labor that has since been recorded, and yet we could not solve the problems; only know something of the effects. Universities grant a degree of Master of Science *Master of Science*, indeed! It really seems it would be better to say, *Child of Light, Apostle of Science. Not even master of one'sself. There is no Master of Science.* Some know more than others, but they are not *Masters of Science.* Yet they walk in the light.

These questions propounded resolve themselves with all the knowledge of, well—Masters of Science, and plain creatures of circumstance combined, into a problem of vibrations and the ability to receive and record them. It is not necessary here to enter into the discussion of rate or amplitude of vibration and other discovered facts regarding vibrations so practically and beautifully shown by Nikola Tesla, Clerk Maxwell, Lord Kelvin, Elihu Thompson, Edison, Marconi, and others. Really we do not possess five or six or seven senses, only one—the ability to receive and record and transform vibrations.

Helen Keller feels what the one gifted with five senses cannot see or hear or feel, or smell or taste. Ordinary common touch records vibrations slowly. The intense tender touch of the blind, the educated practical physician and the gambler, have what might be termed eyes on the end of every finger and thumb they possess. Seemingly deaf ears may hear vibrations through the skull or the bones of the body. The rods and cones behind the rhodopsin, the visual purple of the retina, may be likened roughly to the metallic cylindrical cones—pipes, if you please—of a musical organ usually seen in churches. The close, deep basso may shatter a fine-blown wine-glass if the tones are cylindrical and concentrated outside of the arch but inside of the glass. This is sound; this is energy. The cricket's chirp is not heard by some unhearing human ears that seem normal. A grain of sand allowed to fall into a quiet water makes no apparent ripple on the waveless, intensely quiet, glassy surface. Let fall one pound of the same in the geological shape of granite, feldspar, oolite, flint, or some igneous combination, and the hearing ears will detect a thump, a gurgle, and first-seeing eyes will record a splash. Concentric mathematical circles will follow in dying wavelets to the far long lush grasses of the windless distant banks. This is energy, gravitation, by resistance of the water, transformed into vision, into hearing. Drop the same stone, pound of something, through space; it strikes a solid surface, there is no water; light, heat or sound follows; there is transformation of energy. Should this be a living body; perhaps death. Not death; transformation of energy. For "There is no death. What seems so is transmission." This is seeming death; darkness changed into *light;* earthly knowledge changed into power, into more rapid vibrations, into another star or world, into a different form from another being. "That only died last night." There is no loss of energy even in death, for, "End and beginning are dreams. Birthless and deathless and changeless remaineth the spirit forever."

Sir Isaac Newton witnessed and learned *something* of gravitation from his youthful view of the falling apple, and elaborated this seeming simplicity into its mighty grasp and laws that govern whirling worlds revolving in their bidden and endless spheres. Work of human hands to time is nothing; seemingly it lives long, but we only derive our idea of time from its apparent fleeting. No, we are fleeting, passing away. Time stays always. Light is always. What we may be when transformed.

Newton was asked, what was gravitation? His reply remains as classical as the whisper of Galileo. Does it not either appear coincident or strange—strange to some, coincident to others, and facts to a few.

The day Galileo died Newton was born. He possessed the genius of Galileo in astronomy, physics and mathematics, and almost surpassed his predecessors—El-Hazan, the Arab, for instance, whose great work exists in the Leyden collection (No. 1011—*Kitab el*

Mandzir) and who was otherwise known by Mohammed as ibn el-Hazan. Even his works undoubtedly were founded on those of Ptolemy. He plainly made known how we see in the light one image with *only* two eyes. Ptolemy and Euclid derived their inspiration of mathematics, geometry and optics from light, and Hazan claims to have restored the first lost book of Ptolemy in the shape of Nâsir ed-Din Tusy.

Did Ptolemy and Hazan die? Does the work men do live after them? Then Newton's three laws of motion, his discovery of gravitation and his Principia will ever remain as immortal as Galileo's discovery of the telescope and the satellites of Jupiter, the difference of the solar and the siderial day, foretold eclipses of the sun and moon, and made changes of Chaldean calendar or Gregorian from the weary sand-glass and the sun-burned dial to the busy ticking pendulum and the faithful wound-up chronometer. Was this transformation of energy? transmigration of soul? or simply coincidence? Chaldee, Arab, Galileo; again in Sir Isaac Newton. Is he dead yet? As far as physical form is concerned, yes; but for vibrations, *no!*

"Lost in earth, in air or main,
Kindred atoms meet again."

The ignorant might say, it just happened so. If happenings were so, just so, uncertainty would necessarily begin to exist and the foundation of precision and philosophical reasoning would receive a shattering blow. The eyeless fishes in the waters of the Mammoth Cave find their food and thrive under difficulties in darkness. They must feel; feeling is knowing, and they earn their living 'blind.

It has been said. "Art is long and time is fleeting.' What a pity —? Art is so long and time is fleeting. Time is not fleeting—*we are fleeting*—time is always; art is short in any given existence or individual and we are foolish enough to think that time fleets, measured by heart-beats, minutes, seconds—yes, but there will always be seconds—always be heart-beats—always be minutes —for, as we seem to know it now, always the sun will rise and set in its life-giving power, in its splendor, in its intensity, in its golden setting, as if the Great Spirit were shaking the embers from the hearthstone and as they fall into the dimpled sky near the fleeting wings of the home-bound red swan, we see the glorious glow of the red and the blue, and the gold, violet, indigo, green, yellow, orange; blood and milk, the touch of the master's hand on the canvas of the clouds—and sky—sunset; no, the sun never sets; it keeps its own place—almost—only seems to set. What we call setting, the inhabitants of Borneo and the Antipodes call rising. Then what seems to go under a dark and yellow cloud, even black, will arise, for the darkest clouds have their silver lining on the other side. And the words of the Kaleva that claim their place in literature with the *Mahabbarata*, the *Ionian songs*, the *Shahnameh*, the *Nieblunge* and the *Roland songs*—whatever these are.

"Bring again the golden moonlight,
Bring again the silver sunshine."

Even the moon with its spots remains the moon. Even the sun, with its spots, will always be *the sun*, and astronomers, who have been astute enough to see these spots, do not know what they are; what they mean. Bunsen, by his weird and talented genius with his spectroscope—the child of light—analyzed the contents of the sun. Kirchoff was his confrere and in the little bands. Fraunhofer's lines: We to-day find with light the subdivision and entity of an inorganic compound that surpasses in millionths the finest vibration of a *torsion balance*, that measures weight so infinitely more accurate than duelists measure swords:

"Worthy cataracts and rivers
Never empty all their waters."

And light is our theme. The cyclical law of circles, whatever that may mean, seems to carry us beyond our scope; yet, as the lost individual surely may return again to his last starting place and really know he is lost even in the light and has not arrived into finding himself any nearer than the last place he started from. Few of us know where we really are; where we seem to be, is different; where our friends the enemy—would wish us to be—is also different quite. Even in the light. Enlightenment means the perception of light and its physical action on earthly inhabitants—animal, vegetable and mineral—and the susceptibility to mental and physical growth, education. Expansion—the obliteration of a mental 2x1 and the perfection of the third story into its southern exposure and its sunlit 56-ounce unhydrocephalic brain.

One cannot get something from nothing; it often seems so, though. Light, heat, energy is never wasted. Helmholtz elaborated his laws of the correllation and conservation of energy and elaborated his *child*, the ophthalmoscope, on—light. It is a tender recollection to many men—when boys—they stole away "In the thicket of the willows till the bell in the village was still, and they gleefully hunted the gurgling waters and the dark wild woods of their innocent days and returned home with sunburned backs—sun dermatitis—that a kind mother or a faultless-finding grandma had to dress with cream and things for a few painful days.

As we said before, energy is never wasted; when it disappears in one form it reappears in another. The coal of past remote ages, from the sunlight originally, gives us electricity to-day—to-night. We are literally basking in the sunshine, the light perhaps of a million years ago transformed. And how this light has been neglected. Is it because it is so free and seemingly common? Why are the sour milk pans and containers exposed to the sun? Why are the carpets and ruggs, dusty, moth-eaten or worn, exposed to the sunlight? and why do foul things in the light vanish into a sunlit day dream? Why are the mouldy shoes so long in the darkened closet placed in the sunlight? Why does the bromide of silver in gelatin

plates when properly light-struck and carefully developed show the image that we hold dear to our hearts and makes the artist get a prize—when he knows how? Why does "the little peach of emerald hue" grow into the Queen Elberta and have the crimson blush and the sweetness, the ambrosia on the southern side, while the darkened side remains almost unripe? Why does the seed on the sunlit side have the pink and crimson when covered with a layer of peachy flesh?

Why does the sunflower "turn on her god when he sets the same look that she gave when he rose?" Why are tropical nations dark? Why are northern races fair? Why is the polar bear white? Why is the elephant and the crocodile or the alligator dark? Why does the moss and the lichen—parasites—grow on the north side only of the trees, where there is little sunlight? Every Indian and skilled backwoodsman can find the south and the east and the west and his location from this alone. Ancient eastern nations and the Romans had their life-giving sun baths and solaria. Röntgen and Finsen have shown the way—one with the X-ray, the other with cold light—i. e., Finsen light, actino lite. We are only on the border yet.

Sunlight makes the forest bud and bloom. Why may it not make the pallid cheek growd red? Why may it not make the lupus and skin blasto myces and even some forms of cancer vanish from the stricken being as the snow melts and trickles away with a goodbye gurgle down the hillside in the springtime? In the dungeon the prisoner is pallid and anæmic; in the darkened cellar the sprouting onion and potato are pale and white and brittle and covered often with the growth of a fungus or mycelium and have no chlorophyl in their sickened, weakened cells. In the celler of the brewery the dark rats grow to be white. Why do we see in the rays of sunshine coming through the lattice gay, playing, fleeting dust particles? These particles vibrate there because they are energized by the light. All energy is capable of doing work. Light to the eye is great gift of seeing. "Seeing is believing," and when one sees so little how can they believe? Much. One does not perceive the dust in the light ray through the window or the open lattice, just because one can see more acutely in the light. The dust is forced to come there, to go, vibrate, in the finest trembling rays, out and come again, dance the "sun dance" and faint and fall and are no longer life-giving to their kind or death-dealing to some; no longer what they were.

One may hide his light "under a bushel" and there will be more light under the bushel than there is in the darkened surrounding. Light is energy, whether we hold to the corpuscular or emission theory or the undulatory, the translation of particles, or oscillation, the sun's action on the luminiferous ether or the dreamy hypothetical ether.

Vibrations now seem to cure certain diseased conditions. They do. They have cured them, always. Yet so little understood, be-

cause we are small and so late in finding the X-ray, the actino lite, or cold sunshine—Finsen's light—condensed light passed through double convex lenses and robbed of its red heat rays by a prism of iceland spar or selenium or a bath of alum in distilled and airless water. When God created the world and found it was so good his third command was, "Let there be light, and there was light," and the light has been kind but neglected. The story is too long of light.

"At the dawning of the morning
Therefore should I end my singing,
As my song is growing weary.
Thus beginning and thus ending
Do I roll up all my legends;
Roll them in a ball for safety,
In my memory arrange them,
In their narrow place of resting,
Lest the songs escape unheeded
While the lock is still unopened,
And the teeth remain unparted,
And the weary tongue is silent."

Alexander the Great sought Diogenes the Cynic and asked him what favor his conquered world and himself could bestow upon him. His answer was: "Only get a little out of my sunlight." The Prince said: "If I were not Alexander I would be Diogenes."

It is predestined for all once upon this earth to die, and the prayer of Achilles, spoken in painful, uncertain tones before the slender thread was broken, comes forcibly more to us now and says in its Homeric refrain, "Since I must die, let me die *in the light.*"

And while life's sands are flowing in the glass,
Bent shades love *light* of kindest sun or moon.
Stern Atropos, the unrelenting lass,
May use steel shears on golden threads *too soon.*

The New Orleans Polyclinic will open its sixteenth annual session November 3d, 1902, and close May 30, 1903. To Southern physicians the Polyclinic is of especial value and benefit, as they see there tropical diseases from most all tropical countries, including those to be seen and found among us. Laboratory courses and the specialties are fully taught. New Orleans Polyclinic, 797 P. O. Box, New Orleans, La.

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A number of distinguished foreign as well as American medical writers have contributed to the volume before us, which is one of unusual interest. It opens with a lecture under the general head of Therapeutics, on The Treatment of Diabetes Mellitus, by Professor Lepine of Paris, which, though it contains numerous useful suggestions, is not sufficiently full to be entirely satisfactory. Following this are articles by Romme of Paris; Müller of Erlangen (on "Bladder and Rectal Troubles in Nervous Diseases"); Ernest Finger of Vienna ("Treatment of Acute Urethritis"); Lucas-Championère of Paris ("Passive Movements and Massage for the Treatment of Fractures"); Albert Robin of Paris ("Treatment of Simple Ulcer of Stomach"); and Leguen of Paris. Several of these are particularly good.

Under the head of Medicine are two noteworthy lectures on "Cirrhosis of the Liver," by Arthur R. Edwards of Chicago, and A. L. Benedict of Buffalo. The latter, entitled "Hepatic Sclerosis, Auscultatory Percussion," conveys much useful instruction concerning methods of diagnosis and treatment in this affection. There are numerous other scholarly and valuable articles conveniently classified under the heads of Surgery, Obstetrics and Gynecology, etc.

The Artificial Feeding of Infants—Including a critical review of Current Literature on this subject. By Charles F. Judson, M.D., Physician to the Medical Dispensary of the Children's Hospital, and J. Claxton Gittings, M.D., Assistant Physician to Children's Hospital. Pages 368. Price, $2. Philadelphia: J. B. Lippincott Company, Publishers.

Every physician who treats children should read this book through with care, as it contains a review of all the latest treatments, from

the civilized world, having a vast quantity of translations from foreign works, giving tables of Analyses of Milk, Digestion, Modern Method of Infant Feeding, Care of Milk, Bacteriology, Sterilization of Artificial Foods, Chemical Changes in Sterilized Milk. This book, well written, not tiresome in any part, but instructive in all, takes care of the babies' food under all conditions.

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This valuable work has been designed not only as an aid to the beginner, but also to help the practitioner who, having graduated at a time when histology was not taught in all the colleges, desires to gain sufficient knowledge of the subject to facilitate his better understanding of pathology. Both these aims it admirably fulfils, as is evidenced by the demand for a second edition in so short a time.

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This book is gotten up in an interesting manner, and the illustrations which are given are both good and instructive. It gives the essential points of Neuroses of the Genito-Urinary System. The author has done his work well, and the book should be in every physician's library.

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PROGRESS
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MEDICAL SCIENCE.

THERAPEUTICS

UNDER THE MANAGEMENT OF
MARION X. CORBIN, M. D.,
SAVANNAH, GA.

Treatment of Pulmonary Hemorrhage by Subcutaneous Injections of Gelatin.—Ludwig Thieme is enthusiastic in regard to the value of this treatment for pulmonary hemorrhage. He reports its use in twelve cases, upon the results of which his opinions are based. This method should not be considered as a last resort in the treatment of this condition, but should be employed in all cases in which the hemorrhage is at all severe, even before other remedies have been tried and found wanting. In Thieme's experience no considerable local disturbance has been produced at the site of the inoculation. Sodium was always added to the gelatin solution before injection. The swelling following the inoculation was generally massaged and an aseptic dressing with iodoform gauze applied. Two cases in which these precautions were not observed showed more marked local disturbances than the others. As a rule, fever follows the inoculations. In some cases it lasts for four or five days, and the evening temperature may reach 40.3°–40.7° C. (104.5°–105.2° F). All the inoculations were made into the outer surface of the thigh. One hundred cubic centimeters was the quantity uniformly introduced at one sitting.—*Med. Rec.*

The Treatment of Typhoid Fever, with Special Reference to the Use of Water.—G. W. Boot urges the free use of water by the mouth, by the bath and by enema. Milk is the best diet, because, in addition to furnishing all the proximate principles necessary for the nourishment of the body in assimilable form, it furnishes more water than any other form of diet. But plenty of water should be given in addition. In his country practice, where tub baths are out of the question, the author has the patient placed on a rubber sheet, into which he sinks, forming a hollow. A pitcher of water at 80° or 90° F. is poured over him, and the water which accumulates around him is repeatedly soused over him by means of a large sponge, and cold water is constantly added. This reduces the temperature, stimulates respiration, and, by change of position, prevents hypostatic congestion of the lungs and pneumonia. Purgatives and ene-

mata lessen the amount of infection; carry away the toxins formed in the intestines and eliminated by the bile; removes the toxins eliminated by the intestines, and lessen the local infection, by providing drainage for the infected Peyer's patches. They are not contraindicated, but rather indicated in diarrhœa.—*St. Paul Med. Jour.*

The Salivary Secretion in Nervous Diseases.—A. Acquaderni reaches the following conclusions: Sialorrhœa is found in many nervous affections, and is a symptom to be classed with polyuria, glycosuria, and icterus. It is produced either by direct irritation of the salivary center (affection of the medulla), or by abolition of the cerebral moderating influence, or stimulation of the secretory tracks of the hemispheres (softening, hemorrhages), or reflexly through some lesion irritating the sensory nerves (neuritis—tic douleureux). In central paralysis of the facial nerve the salivary secretion of the affected side does not appear to be modified, and in no case is it diminished, but, if anything, increased. In peripheric facial paralysis there is diminution or abolition of the secretion, according to the severity of the lesion. Prognosis of sialorrhœa depends upon the affection in which it occurs; in some it indicates the progress of the disease, and in the absence of other bulbar symptoms, indicates involvement of the medulla (labio-glossal laryngeal paralysis, tâbes, anyotrophic lacteral sclerosis). Persistent and prolonged sialorrhœa may, independently of the disease causing it, considerably aggravate the bad condition of the patient.—*Rivista Critica di Clinica Medica.*

The Right and Wrong Use of Digitalis Based on Cardiac Pathology.—William Henry Porter reviews the various effects of digitalis. It increases primarily the motor force of the heart muscle. It increases at the same time the resistance offered in front of it, so that the rapidity of action of the heart must be diminished in order to increase its working capacity. In both insufficiency and stenosis of the left auriculovantricular orifice, digitalis improves the condition temporarily. It also intensifies the systolic contraction and more completely empties the contents of the ventricular cavity into the aorta. In both lesions of the neutral orifice the pulmonary congestion is overcome, and the dyspnœa consequent upon the pulmonary engorgement removed. Once the normal tension has been reached and passed, the action of the digitalis is detrimental to all the physiological functions of the body. In aortic lesions, either in incompetency or stenosis, digitalis is not indicated at any stage. In fatty degeneration, or any enfeebled condition of the heart muscles, digitalis is contraindicated. In hypertrophy of the heart digitalis is a dangerous remedy. This drug is of service only for a few days at a time at the longest. It should only be given to influence the heart and circulation when the arteries are very much relaxed and the pulmonary or systemic veins overfilled with blood.—*Med. Rec.*

Two Cases of Acute Intestinal Obstruction Successfully Treated with Quicksilver.—These cases are reported by J. McKean Harrison. The first patient was a man of sixty years, whose condition was most serious. There was constant vomiting, hiccough and great abdominal distension, weak and running pulse and dry tongue. He was given ½ lb. of metallic mercury and 1 gr. of opium was administered every four hours. His condition gradually improved. The mercury came away ten days after it was given. He made a good recovery. The second patient was a man of eighty years, suffering from acute intestinal obstruction. He had ½ lb. of mercury and opium pills every four hours. By the twelfth day after administration the mercury came away, and in about a month the patient's condition was most satisfactory.—*Med. Rec.*

Intravenous Solution of Saline Solution.—George Crile declares that normal saline solution is effectual in shock in proportion to the impairment of the vasomotor mechanism. If this mechanism has gone into resolution, infusion is without curative effect. If the impairment is considerable, the infusion will partly restore the pressure. The peripheral resistance determined the height of the blood-pressure, no matter how swift the stream, nor how great the volume of blood. If the peripheral resistance is lost (fatal "shock") no amount of infusion can more than temporarily and partly restore the blood-pressure and death is inevitable. If the shock is much increased by so-called vascular hemorrhage, as in operations on the splanchnic area, infusion may be effective because peripheral resistance is still present. If hemorrhage complicates shock and the vasomotor mechanism is still intact, infusion is effectual. As to the effect of the varying height of the saline column, it has been noted that increasing the height of the bottle but slightly increased the blood-pressure, as to drug effects, after a considerable amount of saline solution had been infused, the inhalation of chloroform, even in small dosage, produced marked depression of the circulation. Strychnine and nitroglycerin produced their usual physiological action, though to a lesser degree. Thermal, electrical and mechanical stimulation produced the usual effects. In cases of dangerous hemorrhage the combination of oxygen inhalation with saline infusion is beneficial. —*Med. Rec.*

Rectal Alimentation in Certain Cases of Typhoid Fever.—A. Claps reports a case of typhoid fever in which every symptom pointed to a fatal termination of the disease. It was found impossible to give nourishment by the mouth, as each attempt brought on violent nervous crises, therefore rectal injections of concentrated broths with somatose, yolk of egg, pepsin and marsala were given two or three times a day. In about ten days the patient was somewhat improved, so that a few spoonfuls of marsala and of coffee could be given by the mouth. The rectal feeding together with these few

spoonfuls of liquid nourishment was continued for twenty-five days, at the end of which time the patient was able to take nourishment in the usual way. Recovery followed. The author reports several other cases, in all of which he is absolutely convinced that the rectal alimentation was the exclusive factor in recovery.—*La Riforma Medica.*

Local Treatment for Acne.—Charneil recommends the following formula for the local treatment of acne. When the skin will bear it, he uses sulphur lotions, of which the following is an example:

Precipitated sulphur	25 grams
Camphorated alcohol	60 "
Rose water	200 "
Distilled water	215 "

M. et Sig.: Shake before using. Apply at night with brush, allow it to remain all night, and wash in the morning with quite warm water, followed by hot compresses.—*Int. Med. Mag.*

Acute Gonorrhea.—Dr. Cabot, in Med. News, states that if cases come to him for treatment during the first 24 hours they can be greatly relieved, and the gonococci made to disappear from the discharge in the course of a few days. The following silver salt is used:

℞ Argonin, gr. 80– ℥ 2½.
Aq. dest., q. s. ad ℥ 4.

M. Sig. Use as a deep injection into the urethra.

Six drams of the solution should be employed and retained within the urethra, first instructing the patient to urinate and wash the urethra out with a warm solution. Other treatment consists in the use of the following internally:

℞ Potassii citratis, ℥ vj.
Aq. dest., q. s. ad ℥ iij.

M. Sig. One teaspoonful in water t. i. d.

Where the case presents a copious discharge the following is given:

℞ Plumbi acetatis,
Acidi tannici,
Zinci sulphatis,
Cupri sulphatis, aa gr. ij.

M. ft. tabella No. 1. Sig. Dissolve one such tablet in four ounces of water and use an injection after each urination. The importance of the temperature of the injection is emphasized, and he recommends the injection to be given at a temperature of 110 F.—*Jour. A. M. A.*

INTERNAL MEDICINE AND NEUROLOGY.

UNDER THE CHARGE OF

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NOTES CONCERNING A NATIVE REMEDY FOR BLACKWATER FEVER.—The remedy mentioned by D. R. O'Sullivan-Beare is a decoction made from the roots of a cassia which grows in equatorial East Africa from the sea level up to an altitude of 800 feet. The particular species seems not to have been described before, and has been named, in honor of the author, C. beareana. The plant is figured in the article. To prepare it, the natives chop a portion of the root into pieces, each about one inch in length, and of those pieces they boil about one dozen in a gallon of water for half an hour or so. The result is a red-colored fluid, of which the patient suffering from blackwater fever is given to drink, either hot or cold, as often as he feels thirsty. Apparently it is non-poisonous in its action, and may be consumed in unlimited quantity. In cases where the patient does not suffer from marked thirst, the decoction is administered in doses of about a teacupful every couple of hours. The natives employ the same remedy, and they claim for it specific virtues also in the treatment of that simple form of hæmaturia—i. e., unaccompanied by febrile symptoms—which is so prevalent among the negroes of East Africa. The only portion of the tree, other than the roots, employed medicinally by the natives is the bark, which they powder and apply as a dressing, to ulcers, apparently with good results.—*Med. Rec.*

THE BEST METHOD OF ADMINISTERING QUININE AS A PREVENTIVE OF MALARIAL FEVER.—Edward Henry Reed concludes from his experience that the best way of giving quinine as a prophylactic is the following: 1. For male adults in good health, tabloids in 15 gr. doses every fifth day; for those in poor health, the solution used in the same way, or 15 gr. powder in a tablespoonful of porridge or milk. 2. For female adults, 8 gr. should be given instead of 15; pregnant women may take $2\frac{1}{2}$ gr. daily, in either of the above ways, from the beginning of pregnancy. 3. Children of either sex under one year, $\frac{1}{2}$ gr. of the powder every third day in a spoonful of milk, followed by a spoonful of jam or honey; those from one to five years, 1 gr. every third day; from five to ten years, 2 gr. every third day; from ten to fifteen years, 3 gr.; above fifteen years, the ordinary adult dose, taken in the same way.—*Med. Rec.*

Gastralgia—Its Treatment.—Gastralgia is, for therapeutical purposes, divided into two groups by Professor Saundby (N. Y. Medical Journal). The first group comprises those cases in which pain occurs independently of eating, and the second group, those cases in which the pain occurs after food is taken. The treatment of the first class consists of change of scene, a voyage or mountain air, abundant food at regular intervals. The palliative treatment consists of iron, quinine, arsenic, nux vomica and the mineral acids. For the second class, the treatment is, rest in bed, milk and lime water in sufficient quantities—say an ounce every hour. A nutrient enema of one egg, beaten up in four ounces of milk, to be given every four hours. The amount of milk should be increased with improvement, and if milk fails, from two to three ounces of lightly cooked mince meat may be substituted. For the relief of the pain in both cases, Saundby gives morphia or heroin, but in a recent clinical report Professor Boone, College of Physicians and Surgeons, St. Louis, states that he finds one Antikamnia and Heroin Tablet (5 gr. Antikamnia and 1-12th gr. Heroin Hydrochloride), given as required, not only relieves the pain, but prevents its recurrence, much more satisfactorily than either heroin or morphine alone. In other respects he concurs with Professor Saundby in his method of treatment.—*Denver Med. Times.*

The "Poultice Method" of Healing Cutaneous and Subcutaneous Abscess Cavities.—M. B. Hutchins' method is simply to apply over the opening of the abscess a poultice of flaxseed meal, made with three per cent. carbolic, instead of plain water. A thin cloth or gauze layer can be put next to the opening. The three per cent. of carbolic acid really becomes about one per cent. in the mixture and is hence very weakly germicidal. Absolutely nothing is put in the abscess cavity, it simply being emptied of pus by pressure—through a small opening—if not already open. The poultices are changed as often as cleanliness or their getting dry requires. The wet poultice affords constant drainage and absorbs the discharge. The moisture in the poultice and the constant flow of discharge prevent premature union of the mouth of the cavity. There is no painful packing in of gauze strips and retardation of healing by the presence of the foreign substance—gauze. There is no reinfection in dressing and there is a saving of from 75 to 80 per cent. in time of healing. When incision is necessary it may be small, instead of "free" and long. The pressure of the poultice adds to the coaptation of the walls, and the rapid removal of discharge clears the way for natural reparative processes. The successful use of rubber adhesive plaster or some occasions shows the effect of simple warmth and moisture in facilitating healing from the bottom.—*Med. Rec.*

Hypertrophy of the Tonsils.—Ed. Laval thinks that it would seem logical to treat in the same chapter of pathology hypertrophy of the tonsils and adenoid vegetation. These affections often occur in the

same subject. Hypertrophied tonsils fall into two groups, clinically, viz, those which are greatly hypertrophied, and those which are enlarged to only a moderate degree. The very large tonsils may be either hard or soft. When the tonsils reach the size of a large hazel-nut they are generally hard. The only treatment of any avail in these cases is ablation. It should always be remembered that no operation is to be undertaken till the inflammation has disappeared. After the operation, only soft food should be taken for a week, as the wound must not be irritated. Although, as a rule, very large tonsils are firm, white and sclerotic, now and then they are soft, congested and red. In such cases the only treatment suitable is cauterization. In cases of moderate hypertrophy, treatment ought to begin with curettage. If this is not curative, cauterization ought to be tried. General treatment should always be resorted to, consisting in the administration of cod-liver oil, in exercise and in open-air life.—*Bulletin Général de Thérapeutique.*

The Indiscriminate Use of Atropine in Eye Diseases.—H. Carter Mactier warns all medical men to use atropine with the greatest care, and in all patients over thirty years old—the predisposition to glaucoma increasing with age—to use it only in cases of necessity, and then only if the patient can be kept under constant observation. He gives the differential points between acute glaucoma and iritis. In the former the pupil is larger than usual, and does not react to light. In iritis it is smaller than usual and also fixed. Ophthalmoscopic examination of acute glaucoma shows the media to be hazy, and there will be a grayish-green reflex. In iritis there are small exudations in the media, and the pupil's irregularity is due to these binding the iris to the lens. In acute glaucoma the tension will be found increased. In iritis it is normal. In acute glaucoma the loss of vision is out of all proportion to the turbidity of the media, and is greatest on the nasal side. In iritis it is often not diminished except by photophobia. In glaucoma the cornea is generally almost insensitive to touch, while in iritis it is hypersensitive. The presence of vomiting with an inflamed eye is almost diagnostic of glaucoma, though it may occur in iritis. Confirmatory symptoms should always be sought in such cases.—*Med. Rec.*

Typhoidal Hemorrhages.—Adrenal substance has been used successfully by W. Coleman (Medical News) in five cases of intestinal hemorrhage, two of which were quite severe. He gave 15 gr. of the substance every two hours during the day and every four hours during the night, gradually diminishing the dose.—*Denver Med. Times.*

SURGERY.

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PROFESSOR OF ANATOMY AND CLINICAL SURGERY, MEDICAL DEPARTMENT UNIVERSITY OF GEORGIA AUGUSTA, GA.

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FORMERLY INSTRUCTOR OF SURGERY N. Y. POST-GRADUATE SCHOOL AND HOSPITAL; LATE ACTING ASST. SURGEON U. S. A., SAVANNAH, GA.

THE TREATMENT OF RAWED PERITONEAL SURFACES IN ABDOMINAL OPERATIONS.—J. Clarence Webster emphasizes the need for careful treatment of rawed peritoneal surfaces in order to prevent the formation of adhesions and intestinal obstructions. Small patches on the parietal peritoneum, the bladder, and the back of the broad ligaments may often be covered by loosening the peritoneum round them, and bringing the edges together with catgut. Similar surfaces on a mesentery may be quickly closed by a continuous suture. Areas of omentum, which have been freed from adhesions, should not be left free; but if slight, should be covered with neighboring healthy omentum, and, if extensive, ligatured near their base and cut away. Raw surfaces on the intestine may be covered by a continuous catgut suture when small. If large, a thin flap can be cut from the omentum and stitched to the raw surface with fine catgut. The gap in the omentum is easily closed with catgut. In very bad cases it may be advisable to resect the affected portion of the bowel. Small areas on the uterus can be covered by means of a running suture. If the patches are large or numerous, transplantation of grafts of peritoneum may be tried. Frequently the author has simply cauterized such surfaces so as to form a black char, the char acting as a protection and preventing adhesions.—*Chicago Med. Rec.*

SURGICAL TREATMENT OF DYSMENORRHEA.—H. D. Fry (Amer. Gyn. and Obst. Jour.) says that impaired general health and normal pelvic organs, stenosis of the cervix, endometritis, displacements of the uterus, diseases of the appendages with impaired general health, or a combination of the foregoing conditions are the usual characteristics found in painful menstruation. In the latter two conditions surgical interference may or may not be indicated. If the pain is acute or is limited to the first day or two, with relief in the intermenstrual period, surgical treatment is not demanded; but if the pain extends over a number of days surgical treatment is indicated.

Goodell advocated the method of rapid dilatation and this was supplemented by curettage. Then the application of caustics to the denuded surface with drainage was added and still the results were

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not satisfactory. Later Dr. Gill Wylie employed a drainage plug held in position by a Smith pessary for six days. The author follows this mode of procedure, but keeps the plug in for from three to six weeks and confines the patient to her bed for two or three weeks. If no discomfort is experienced, the patient is permitted to go about with her plug *in situ* for several weeks longer. The hard rubber drainage tube causes the formation of a cicatrical ring of tissue at the point of construction which ensures patulency. In a few cases the plug produces pain and must be removed sooner than the specified time. When there are fibroids or displacements or even painful ovaries the author follows out this method of treatment and later performs a second operation to relieve the other existing conditions. —*Charlotte Med. Jour.*

Injection of Strychnine into the Wall of the Left Ventricle in Asphyxia During Anesthesia.—R. D. Pinnock, in a communication from the Ballarat Hospital, Australia, reports a successful case of direct injection of strychnine into the wall of the left ventricle in a patient apparently moribuad during anesthesia. The operation was upon a Chinaman aged 57, for a recurrent sarcoma of the glands of the left side of the neck. The first few whiffs of chloroform were followed by rapid cyanosis. During the early portions of the operation the respiration failed twice. A. C. E. mixture was given, and was being administered at the time of the third failure of respiration, when the heart's uction failed, and artificial respiration was resorted to and continued for twenty minutes. Two hypodermic injections of one-thirtieth of a grain of strychnine were given. Rapid and intermittent pressure was made over the heart. At the end of twenty minutes there was no visible cardiac pulsation, and to the medical men present the patient appeared to be dead, and it was thought useless to continue the artificial respiration further. At this point the wall of the left ventricle between the fifth and sixth ribs was injected with ten minims of a solution of strychnine containing one-fifteenth of a grain. In seven or eight seconds pulsation could be felt in the femoral artery; simultaneourly the patient gave a convulsive gasp, and in a few minutes, under renewed artificial respiration, began to breathe. The operation was then rapidly finished.

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS.

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Puerperal Eclampsia.—Simpson says in an article in The Lancet that we are apt in this disease as in all others to become empirical in our treatment. A certain line of treatment is very often discredited by the method in which it is employed and carried out, by a want of care and observation on the part of the practitioner in not selecting the proper treatment for the case in question. No special line of treatment is suitable for all cases, inasmuch as many cases of eclampsia will recover speedily with a simple diuretic and diaphoretic mixture and application of heat to the body by means of hot air or vapor bath, or by the simpler means of hot water bags, but there are other cases in which this is quite inadequate to produce the desired effect, viz., the cessation of the convulsions. One must then adopt more powerful remedies for ridding the system of the effete matter and for allaying the irritability of the cerebrospinal system. Morphine has been much used of late and has produced good results with different authorities. Lyle records one death in eight cases lately treated in this manner at the Rotunda, giving a death-rate of 12.5 per cent. Fitzgerald records two cases treated with morphine and atropine with successful results. The results with this remedy have certainly proved encouraging. Morphine is a powerful anodyne in allaying the irritability of the cerebro-spinal system and so controlling the convulsions, but even with this remedy there are cases where fatal results are likely to follow—e. g., cases of nephritis with renal inadequacy.—*Massachusetts Medical Journal.*

Apparent Death of the New-Born.—Ribemont-Dessaignes (Thirteenth International Congress of Medicine) mentions the various methods of removing mucus, etc., from the air passages, and stimulating the peripheral nerves in order to start respiration. In cases in which wiping out the pharynx, rubbing, hot and cold baths, and similar measures fail, he prefers instrumental insufflation. For this purpose he has devised an intubation apparatus which he claims allows easy aspiration of mucus, and permits the entrance of only a

limited quantity of air into the lungs, avoiding the danger of rupturing the walls of the air vesicles.

Champneys also favors this method. He opposes mouth-to-mouth insufflation, as exposing to rupture of the lungs, tuberculosis, and distension of the stomach. Of methods of manipulation, he considers those of Schultze and Sylvester as possessing merit and those of Marshall-Hall and Howard as useless in children.

The rules observed by Scultze are: 1. If the child is reddish-blue, he leaves the cord uncut, wipes out the mouth, and excites cutaneous reflexes. If there is no immediate response, he cuts the cord, and plunges the child for an instant into a cold and then a hot bath, repeating until the child cries vigorously. 2. If the child is pale and flaccid, he cuts the cord at once, wipes the pharynx, and performs artificial respiration by Sylvester's method or his own, with occasional use of the hot bath. If respiration remain superficial, the iced bath is also used.

At the Maternity Hospital at Bucharest, Draghiescu employs wiping out, aspiration of mucus by a tube, mouth-to-mouth insufflation, followed by artificial respiration by pressure upon the chest and abdomen. Oxygen insufflation is something of value.—*American Journal of Obstetrics and Diseases of Women and Children.*

Beef-Juice in Infant Feeding.—Much has been recently said of the evils of feeding beef-juice to children during infancy. There is good reason to think that during the period of literal infancy, that is, the non-speaking first two years, beef-juice is not to be employed as a regular article of diet, unless especially indicated. There seems no doubt, however, that at times its employment is not only justifiable, but entirely in accord with rational thought in the etiological treatment of infantile affections.

Of late years we have become familiar once more with scorbutic affections in children. It was thought that with our greater attention to dietary regulation, such ailments would not occur unless very exceptionally in our modern life. In these cases beef-juice has appeared to many specialists in children's diseases to supply most suitably the salts whose deficiency in the child's previous diet gave rise to the scorbutic symptoms. Its employment is much more consonant with the idea of treating the child through modifications of its food than by the use of remedial measures of other kinds. Even the vegetable and fruit acids must be considered somewhat in the light of chemical remedies for a condition the exact origin of which is unknown, and whose chemism is at best not completely understood.

Perhaps no more startling bit of information has ever been furnished the medical world than the announcement during the preceding generation that the much-prized bouillon and beef-tea of our forefathers was a good stimulant, but not a nutrient. It had often been said that a pint of beef-tea contained almost the entire nutritive qualities of a pound or more of beef. The introduction of ex-

tract of beef seemed to furnish concentrated food in eminently palatable and digestible form. Travelers and explorers carried it with them with this idea and they were not disappointed in it. Experience proved that there was nothing so uplifting after severe fatigue as this cup that cheered, but did not intoxicate. Then came the chemical revelation that it was not because of any nutritive value, but because it was a natural stimulant that extract of beef gave its excellent results. Beef-extract proved to be not essence of beef, but mainly a composition of the organic meat salts and extractives that are at once tonic and appetizing, though not purveyors of nutrition.

The revulsion of feeling occasioned by the unexpected announcement of a deficiency of nutritive value where so much had been predicted led to the depreciation of meat preparations of all kinds. Meat-juice and other materials that contain large quantities of the albuminous portions of meat shared in this condemnation. As always happens in the history of medicine, the pendulum of medical opinion swung too far to the other extreme. It is under the influence of this other and equally fallacious exaggeration of opinion that we hear meat-juice preparations so unsparingly condemned by certain clinical authorities who do not know the actual chemical status of these substances. Not a little has been said recently with regard to the merely stimnlant effect, especially when employed as an ingredient of infantile feeding. Needless to say, the properly expressed juice of meat is a precious concentrated, yet readily digestible, food. To speak of meat-juice as "beef-cocktail" is to misapprehend entirely its nutritive significance and to mistake its chemical contents. Properly prepared beef-juice is stimulant, but this effect is only of secondary importance compared to its positive nutritive value. To confound beef-extract and beef-juice is to make a serious error. To condemn one because of the othor is to deprive the physician of a very important practical auxiliary in the treatment of exhausted conditions, no matter whence derived and whether occurring in adults or in children. *Medio tutissimus ibis*—there is safety in a middle course. Beef-juice is not a remedy for every disturbance of nutritive metabolism in the child; it is, however, a very precious accessory to other natural and drug methods of treatment, and its indications and limitations should be studied further. Its value will repay the investigators.

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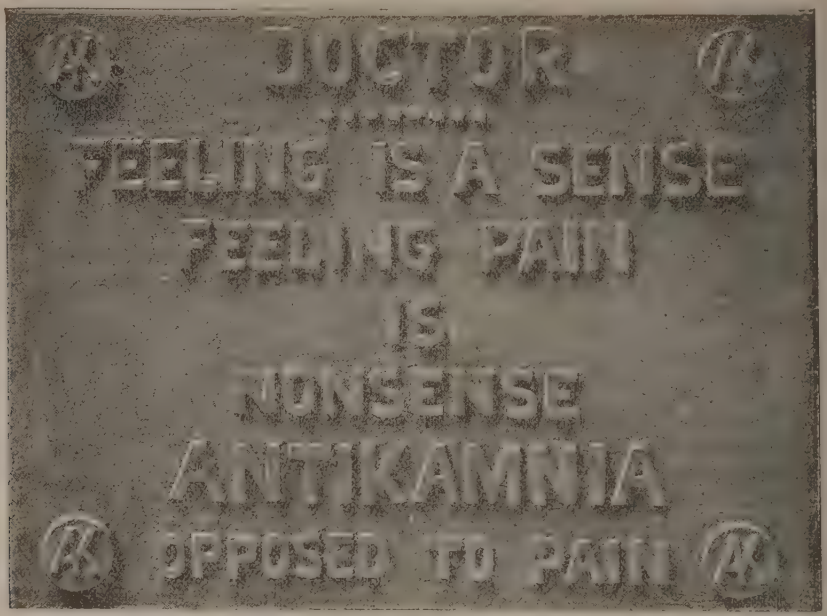
THE EFFICACY OF ANTISEPTICS IN THE TREATMENT OF CERTAIN CONDITIONS WITH SPECIAL REFERENCE TO THE MERIT OF GLYCO-THYMOLINE.

BY C. H. POWELL, A. M., M. D.,

Professor of Principles of Medicine and Clinical Medicine, Barnes Medical College, St. Louis, Mo.

Ever since the introduction of Lord Lister's principles to the medical profession physicians have studiously and patiently investigated the many antiseptic agents introduced to their notice from time to time by different pharmaceutical establishments of recognized repute. Some of these preparations have not stood the test, and as a result "have fallen by the wayside." Others in proportion to their merits are filling an appropriate place in the prescription book. Of these there are but a very few, indeed, and at the head of them all my experience induces me to place Glyco-Thymoline. This remedy, aside from possessing properties of a most positive nature is handled by the Kress & Owen Company in a most thorough ethical manner. The Medical Press is selected by the Kress & Owen Company to the exclusion of all other mediums in order to keep the Glyco-Thymoline conspicuously before the profession. Not only that, but as a further evidence of the sincerity of the firm in believing their product all that is claimed, a liberal sample is sent any physician who may desire to test Glyco-Thymoline. Without going further into the merits of Glyco-Thymoline as an antiseptic possessing decided therapeutic properties, I desire to report a few cases wherein by careful and persistent use this alkaline, alterative solution has given me most excellent results.

Case 1.—Mrs. M. W., widowed, aged 42, consulted me for nasal difficulty of several months' standing. An examination of the nasal fossæ revealed several very interesting conditions. There were grouped together possibly seven or eight foci of ulceration, some of these spots ran together, presenting more or less of a serpiginous ulceration. Each ulcer was covered with a dirty, gray, ash-colored exudate, which adhered firmly to the underlying schneiderian membrane. I first applied, on absorbent cotton, a 50 per cent. solution of peroxide of hydrogen, and having removed the purulent secretion, sprayed the nose thoroughly with a 25 per cent. solution of Glyco-Thymoline in distilled water. I instructed the patient to report the following day for a renewal of the treatment, and, to my surprise, found a healthy-looking surface in place of a suppurating wound. I repeat-



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ed the spraying of the nasal fossæ some three or four times more, and complete healing took place, the nose returning to its normal condition within a week's time from the first application.

Case 2.—Mrs. F. K., married, aged 30, was brought to me for a disturbance of the throat, which, owing to the fact of a member of the lady's family having recently died of tubercular disease, was a source of much worry and mental anxiety to both the lady and her husband. The tonsils were somewhat congested, and showed upon their surfaces several little points of deposits dipping down into the tonsilar crypts. I immediately sprayed the tonsils with a full strength solution of Glyco-Thymoline, and at the same time gave the lady a six-ounce bottle, 50 per cent. strength, to use as a gargle. In three days' time she called to get some more of the solution, which she stated was very prompt in relieving her of her troublesome, tickling sensation. Upon inspection I found the throat entirely cleansed of all exudates and the hyperæmic appearance of the tonsils was entirely removed, the gland assuming an almost normal hue. I again sprayed the tonsils with a full strength Glyco-Thymoline, and renewed the bottle for her, or rather requested her to have the bottle refilled at the drug store. She called again to see me in a few days, and stated she was entirely relieved of all unpleasant symptoms, and did not think further treatment was necessary. I accordingly dismissed her cured.

Case 3.—On the 21st of July, 1902, Miss N. McK. consulted me for considerable nasal irritation, associated with sore throat, sneezing and catarrhal discharge. She had been treated by a nose specialist in Chattanooga, Tenn., with very little evidence of improvement. An examination with the laryngoscope revealed the presence of chronic thickening of the laryngeal membrane, and a large cluster of adenoids filled the posterior nares descending into the larynx. Operation on July 25th under chloroform anæsthesia the nares were completely cleansed of the foreign tissue, 50 per cent. peroxide of hydrogen solution was then used to flush out the cavity, followed by a 25 per cent. solution of Glyco-Thymoline (Kress). The bleeding accompanying the operation was quite free, but immediately after the nasal chambers were thoroughly flushed out with the Glyco-Thymoline an arrest of the hemorrhage occurred. The nose was subsequently flushed out daily with Glyco-Thymoline solution, and a perfect cure resulted in about ten days from the first treatment.

Case 4.—Last May, 1902, I had a young society lady en route to Montana, who was sent me by Dr. Frank Jelks, of this city, for a critical examination of her lungs. A careful examination revealed the entire absence of any lung disease, but the nares contained a polyp. The lady could not take any treatment, but I advised her to have the polyp removed at the earliest possible moment, and as a local agent advised her to spray out her nose twice daily with a Glyco-Thymoline solution, which I ordered for her at once. I lost

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sight of this case until near the middle of July, when I learned that she had never submitted to an operation for the removal of the polyp, but had used carefully and persistently the spray I had prescribed for her, and, having no further difficulty with her nose, believed the polyp to be a thing of the past. She had not used the solution for over three weeks, as she had no occasion to do so.

Case 5.—A young man consulted me some three weeks ago for a sore throat, with lachrymation of both eyes, sneezing, and a great tendency, as he expressed it, of taking cold. An examination of both nostrils revealed great thickening of the mucosa, almost complete occlusion of the left side, and partial occlusion of the right nostril. The tonsils were very much hypertrophied, were hyperæmic in general appearance, and had a grayish deposit dipping down into the crypts. This case, evidently of grippal origin, demanded a prompt treatment to combat the grippe bacillus. For the treatment of this class of cases in particular I have derived the greatest benefit from the Glyco-Thymoline applications applied pure to the throat, and in 25 per cent. solution to the nares. A very useful plan is to flush out the nose once daily from behind forward with the Glyco-Thymoline solution. This antiseptic can be used in weaker solutions, but I greatly prefer the 25 per cent. solutions for nasal work, this strength having given me far better results than weaker solutions.

In conclusion, I desire to call attention to Glyco-Thymoline as an antiseptic demanding attention in the treatment of washing out the stomach. I wish to say that I have been using this efficient antiseptic to the exclusion of every other like remedy on the market. It not only is efficient as a germicide, but is absolutely free from poisonous or irritating influences, and can be used in lavage with the utmost safety and freedom from possible bad consequences. I might enumerate a few cases in which I have used Glyco-Thymoline in the performance of lavage, but believe I am already expecting too much of my readers to claim their further attention. If physicians are in doubt as to what antiseptic to use in practice, give Glyco-Thymoline the first preference. It is prompt in its action, reliable in its field, harmless in its modus operandi. I regard, from my personal experience extending over a number of years, Glyco-Thymoline as being the very best remedy of this class placed at the disposal of the medical fraternity.

Chas. A. Stedman, M.D., Cleveland, Ohio, writes: Upon request I will give my experience in the use of Glyco-Thymoline in gynecological practice as injection both vaginal and intra-uterine. I will say further, no physician, who does obstetrical or gynecological work, should forget this remedy where vaginal douches are indicated, and especially where there is profuse leucorrhea or any inflammation of the genital tract.

The following two or three cases will show results I have obtained with Glyco-Thymoline:

Case 1.—Mrs. R., case of endometritis; inflammation extensive; entire vaginal tract inflamed and tender; os ulcerated to slight de-

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gree, great deal of pain in lumbar region; profuse leucorrheal discharge; patient extremely nervous.

Treatment: Tampons of Glyco-Thymoline were applied and left in situ twenty-four hours. After removal of tampon, I gave patient a vaginal douche of a solution of Glyco-Thymoline and water (2–7). Pain and tenderness rapidly subsided, leucorrhea diminished, and after three months' use of tampons, I instructed her to use Glyco-Thymoline douches three times a week, which were continued for some time. All symptoms of former troubles have ceased and patient considers herself well.

Case 2.—Mrs. W. H., aet 40; married; has had three children; since birth of first child has suffered from very profuse leucorrhea, thick and offensive, producing excoriation of vagina and external genitals. This condition was very much aggravated by a premature birth one and half years ago. Upon examination parts were found to be very tender; uterus enlarged, flabby, and very tender, showing ulceration and cervicitis.

Treatment: I placed tampon thoroughly saturated with Glyco-Thymoline in vaginal vault and allowed same to be left in position for twenty-four hours, this followed by a vaginal douche of Glyco-Thymoline and hot water (1—7). This treatment was persisted in twice weekly for twelve weeks, when patient had nearly recovered. I advised her to use douche once daily. The proper remedies were given from time to time to assist in building up the general health.

Case 3.—Mrs. T. S. C. consulted me for severe leucorrhea, from which she had suffered for over a year. Examination revealed vagina and uterus inflamed and tender. Leucorrhea was thick, acrid and very offensive.

I applied tampons of Glyco-Thymoline, which remained in situ twenty-four hours, followed by douche of Glyco-Thymoline and hot water (1—7) twice daily during interval between treatments. After eight weeks all tenderness and inflammation had subsided and she considered herself a well woman. However, I advised her to continue the Glyco-Thymoline and hot water douches for some time after pain had ceased.

John H. Slevin, A.M., M.D., 25 Rowland Street, Detroit, Mich., writes: Below I cite you a few cases of gynecological character in which I have employed Glyco-Thymoline with exceptionally good results.

I make no attempt to explain the action of Glyco-Thymoline in this brief account, simply reporting clinical facts as I have found them; furthermore, I do not make it a practice to endorse all the preparations that are brought to my notice, but when I find one of such merit as Glyco-Thymoline, I feel that I am only performing a duty to report progress, as it were.

Case No. 1.—Mrs. L., aet. 27; purulent gonorrheal discharge of about one week's standing; discharge bloody yellowish; odor very foul.

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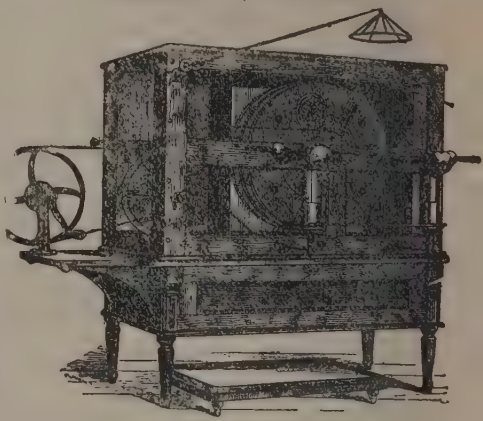

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Case No. 2.—Mrs. McD., aet. 22; os uteri ulcerated; foul discharges; had been suffering for about two years and been treated at various times for leucorrhea. Tri-weekly treatments by means of tampon saturated with Glyco-Thymoline cured the case in four months.

Case No. 3.—Mrs. C. G., aet 42, mother of six children; metritis of several years' standing; os and cervix uteri simply bathed in thick, yellowish, white discharge.

Cleansed surface three times weekly with cotton wrapped around applicator saturated with Glyco-Thymoline; then dried parts carefully after such cleansing and inserted tampon, saturated with Glyco-Thymoline. Instructed patient to allow tampon to remain in situ twenty-four hours, when same should be removed and an injection of Glyco-Thymoline, one ounce to two quarts of water be used. In a little over three months from date of beginning of treatment patient was entirely well.

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H. S. Reeser, M.D., writes: In Glyco-Thymoline the practitioner has a preparation of great value. It is non-toxic and unirritating, distinctly alterative, antiphlogistic, deodorant and antiseptic. On tampons in utero-vaginal catarrhal conditions it is superior to ichthyol, glycerite of tannin, iodine, etc., and also possesses the advantage of being much cleaner.

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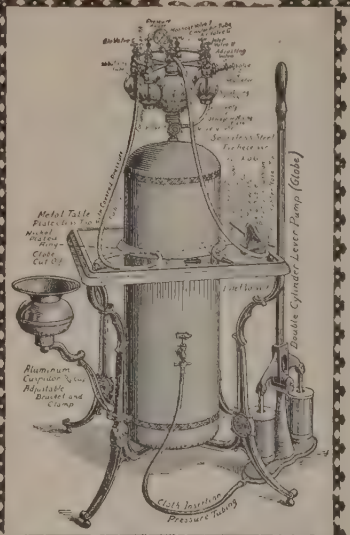

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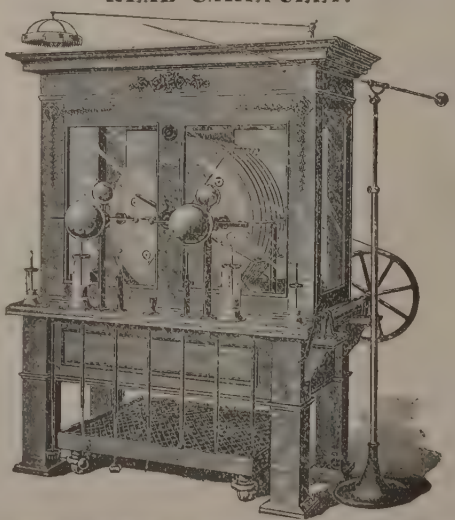

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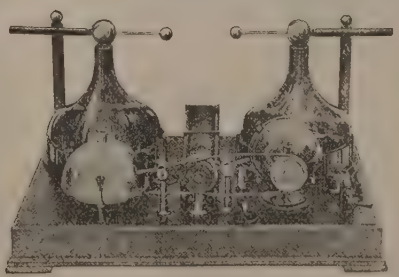

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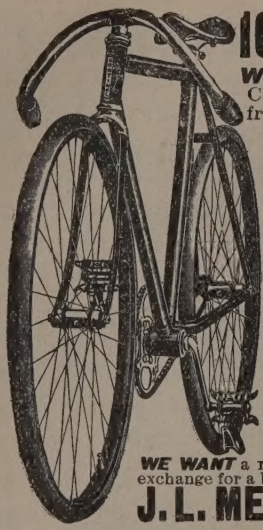

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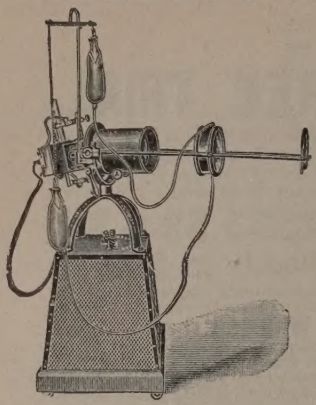

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